



Thomas Binz
Project Manager

May 23, 2018

Mr. Kevin Turner
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
413 North Division Street
Carterville, Illinois 62918

**Subject: Removal Report, Revision 1
Pillsbury Mills Site
Springfield, Sangamon County, Illinois
EPA Contract No. EP-S5-13-01
EPA TDD No. S05-0001-1701-003
Document Tracking No. 2185A**

Dear Mr. Turner:

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting a removal report for the Pillsbury Mills Site in Springfield, Sangamon County, Illinois. The report summarizes the field activities related to the asbestos removal conducted from February through September 2017.

If you have any questions regarding this report, please call me at (314) 550-4208

Respectfully,

A handwritten signature in blue ink that reads 'Thomas G. Binz'.

Thomas G. Binz
Tetra Tech START IV, Region 5 Project Manager

Enclosure

cc: Kevin Scott, Region 5 START Program Manager
TDD File

Tetra Tech, Inc.
938 South Highway Drive, Fenton, MO 63026
Tel 314.550.4208 | Fax 636.326.6790
www.tetrattech.com

**REMOVAL REPORT
PILLSBURY MILLS SITE
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
REVISION 1**

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY

Emergency Response Branch
Region 5
413 North Division Street
Carterville, Illinois 62918




Submitted by

Tetra Tech, Inc.
1 South Wacker Drive, Suite 3700
Chicago, Illinois 60606


EPA Contract No. EP-S5-13-01
EPA TDD No. 0001/ S05-0001-1701-003
Document Tracking No. 2185A
May 23, 2018

Prepared by



Thomas G. Binz
Tetra Tech START IV Project Manager

Approved by



Kristine Schnoes
Tetra Tech START IV QC Manager

CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 SITE BACKGROUND	1
2.1 SITE LOCATION.....	2
2.2 SITE DESCRIPTION	2
2.3 RECENT SITE ENFORCEMENT ACTIONS.....	3
3.0 REMOVAL, TRANSPORTATION, AND DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIALS	6
3.1 LOADING AND DISPOSAL OF PRE-EXISTING ASBESTOS-IMPACTED DEMOLITION DEBRIS	6
3.2 BULK REMOVAL OF ASBESTOS-CONTAINING INSULATION	6
3.3 INACCESSIBLE ACM PIPE-WRAP INSULATION	7
3.4 FINAL SITE INSPECTION FOR ASBESTOS	9
4.0 AIR MONITORING	10
4.1 INITIAL DUST MONITORING.....	10
4.2 PERIMETER AIR SAMPLING DURING ASBESTOS REMOVAL ACTIVITIES	11
4.2.1 Real-Time Air Monitoring using Dusttraks.....	11
4.2.2 Perimeter Air Sampling during Asbestos Removal Activities.....	13
5.0 IDENTIFICATION, BULK CONSOLIDATION, REMOVAL AND DISPOSAL OF ALL WASTE CONTAINERS	15
5.1 WASTE IDENTIFICATION.....	15
5.2 UNIVERSAL HAZARDOUS WASTE DISPOSITION ARRANGEMENTS	15
5.3 DISPOSITION ARRANGEMENTS FOR ALL OTHER HAZARDOUS WASTE	16
6.0 CONCLUSIONS	17
REFERENCES	18

Appendices

- A. Figures
- B. Data Summary Tables
- C. START Field Notes
- D. Photographic Documentation
- E. Environmentally Preferred Practices

1.0 INTRODUCTION

Under Superfund Technical Assessment and Response Team (START) Contract EP-S5-13-01, Technical Direction Document (TDD) No. S05-0001-1701-003, the U.S. Environmental Protection Agency (EPA) tasked Tetra Tech, Inc. (Tetra Tech) START to assist EPA with a removal action at the Pillsbury Mills site located in Springfield, Sangamon County, Illinois. Specifically, EPA tasked Tetra Tech START to perform the following activities at the Pillsbury Mills site:

- Develop and implement an Air Monitoring Plan and Emergency Contingency Plan
- Conduct air monitoring, soil screening, and sample collection
- Perform part-time general oversight, which includes written and photographic documentation of site activities
- Develop a report that summarizes activities completed

This report summarizes the activities completed as part of the removal action. Specifically, the report includes the following sections:

- Site background
- Removal, transportation, and disposal of asbestos-containing waste material (ACWM). Asbestos-related activities include:
 - Loading and disposing of pre-existing asbestos-containing materials (ACM) present in construction demolition debris created by others
 - Bulk removal and disposal of asbestos-containing insulation materials
 - Inaccessible ACM pipe-wrap insulation remaining due to structural safety concerns inside the “C” Mill Building
- Air Monitoring Activities
 - Initial dust monitoring
 - Perimeter air monitoring for total particulates during asbestos removal activities
 - Perimeter air sampling during asbestos removal activities
- Identification, bulk consolidation, removal, and disposal of hazardous waste materials
- Conclusions

In addition, this report contains five appendices. Appendix A provides figures, including a site location map, site layout map, building series layout, Pillsbury Mills site after partial demolition map, and air sampling stations location map. Appendix B provides tables summarizing the transportation and disposal of ACWM and hazardous waste materials, as well as air monitoring and air sampling laboratory data collected during the removal action. Appendix C provides the field notes recorded by START during site activities. Appendix D provides the photographic documentation log of site conditions during the removal action. Appendix E provides information on environmentally preferred practices performed as part of this removal action and other work related to this TDD.

2.0 SITE BACKGROUND

The site is a former grain/flour processing plant. The site was first developed in 1929. Throughout the 1930s, additional buildings and other additions were added leading to the current site footprint. Portions of warehouse #9, warehouse #7, the bakery mix building, and the boiler room have been demolished. Most of the main buildings remain standing and include various pieces of equipment, elevators, and internal debris. Pipe runs and associated asbestos wrap was found throughout the remaining structures.

In 2014, the owners of the Pillsbury Mills site contracted to begin scrap metal recovery and initiated demolition for some of the buildings on the site. As a result of these activities, the site was in disarray and, over a period of time, damaged asbestos-containing building materials were scattered about and routinely disturbed by wind, weather, and on-site contractor activity. On several occasions in August and September 2015, the Illinois Environmental Protection Agency (Illinois EPA) conducted inspections at the site and collected samples of asbestos-impacted building materials. The outcome of the scrapping and partial demolition activities left a large amount of loose, friable asbestos throughout the buildings, along with asbestos-containing rubble and debris scattered upon the site and exposed to the elements.

During the 2015 inspections, Illinois EPA documented that demolition contractors began demolishing portions of the buildings, which included salvage operations for scrap metal. Because of the uncontrolled release of asbestos to the environment, Illinois EPA and the State Attorney General's Office secured a court injunction preventing any further site work by the current owners. Illinois EPA photographed site conditions and conducted asbestos sampling, thereby documenting ACM present both inside and outside many buildings. In a letter dated March 30, 2016, Illinois EPA referred this site to EPA for a removal assessment and possible removal action.

2.1 SITE LOCATION

The Pillsbury Mills site is located on 1525 East Phillips Street at the intersection of East Phillips and North 15th Streets in Springfield, Sangamon County, Illinois, 62702. Site coordinates are Latitude 39° 48' 43.21" North and Longitude -89° 38' 01.50" West. The site is 18.82 acres in size and is located within a mainly residential area in the northeast central portion of Springfield, Illinois (see Figure 1 in Appendix A).

The site is located in a downtown mixed-use area (light industrial, commercial, and residential) and is adjacent to Union Pacific rail lines. To the south and west are residential areas and to the east is

railroad property. The capital building of the State of Illinois is located approximately 1 mile southwest of the site and Interstate 55 is approximately 1.5 miles east of the site. Over 11,000 people live within 1 mile of the site and a public school is also located nearby.

The nearest residences are located approximately 100 feet from the main entrance.

2.2 SITE DESCRIPTION

The site is a former Pillsbury grain mill consisting of several warehouses, office buildings, grain-mixing operation buildings, grain storage silos, and vehicle parking areas (see Figure 2 in Appendix A). The site complex is large and originally consisted of 26 buildings (see Figure 3 in Appendix A); however, the site was vacant for approximately 10 years prior to scrap metal recovery and demolition activities. Figure 4 in Appendix A shows the current condition of the site after the 2015 demolition of several buildings.

Most of the site contains abandoned buildings covering the surface area. Buildings include grain storage elevators; the front office; and the facility's main industrial complex, with mill buildings, manufacturing areas, warehouses, and railroad spurs previously used to deliver un-milled grain. The buildings are predominately contiguous throughout the first and second floors and have multiple, interconnecting basements joined on the south and north by grain and flour bins. All but one of the three building basements were flooded prior to the start of asbestos removal work. About 850,000 square feet of processing and warehouse space was still present in the complex. The site is fenced along the west and south sides, and bounded by Illinois & Midland (I&M)/Tazewell & Peoria (T&P) Railroad spurs along the east.

2.3 RECENT SITE ENFORCEMENT ACTIONS

According to Illinois EPA, in 2014, the site owners contracted to begin scrapping activities and demolition of some of the buildings. The scrapping and partial demolition went forward with no (or inadequate) abatement of asbestos. Piles of bagged and un-bagged asbestos, damaged asbestos hanging from pipe runs, and asbestos debris were observed throughout the site. Some asbestos was present on the surface and could potentially become airborne.

In the summer of 2015, scrapping and demolition activity continued, creating additional ACWM in rubble and debris piles. As a result of these activities, the site was in disarray; asbestos-containing debris materials were disturbed, scattered, left unprotected, and subjected to further deterioration from the elements.

On August 19 and September 1, 2015, Illinois EPA conducted site inspections and collected samples of ACM. Most notably, these samples came from debris piles strewn about inside and outside the buildings (Warehouse #6) and from pipe insulation found on the floor in the buildings (Warehouse #4, Grocery Mix building, and Warehouse #6) (see Figure 3 in Appendix A). Illinois EPA laboratory sample results concluded that ACM was present inside and outside the buildings, and co-mingled with debris piles. Asbestos-containing debris piles were observed by Illinois EPA personnel near the Phillips Street main entrance gate during the August 7, 2015 inspection.

The August 19, 2015, sample analyses showed 15 of 17 bulk sample locations contained between 2 percent and 70 percent of chrysotile; and between 5 percent and 40 percent of amosite asbestos, including friable asbestos. The September 1, 2015 sample result showed that asbestos debris was found outside the buildings on the ground near the main entrance to the facility (Grocery Mix building). As a result of these documented conditions, Illinois EPA and the Illinois State Attorney General's Office procured an injunction against the site owner and other related individuals prohibiting any further site work.

On May 17, 2016, EPA Region 5, On-Scene Coordinator (OSC), Kevin Turner, performed an assessment of suspected ACWM at the site in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR Part 61.141 and 61.145. The OSC documented the presence of friable asbestos, ACWM, and regulated asbestos-containing material (RACM) at the site. As a result of those findings, a fund-financed time-critical response action became necessary to mitigate the threats to public health, welfare, and the environment posed by the presence of uncontrolled asbestos waste located throughout the site.

On June 2, 2016, EPA and Illinois EPA met at the site to evaluate and review the asbestos analytical data. All samples were analyzed using polarized light microscopy (PLM) and were considered positive for asbestos if the sample contained asbestos greater than 1 percent weight by volume.

In August 2016, Illinois EPA collected additional asbestos samples demonstrating that ACM and transite found outside Warehouse #7 and the bakery mix tower building (near the fence) had been released to the environment.

Asbestos was the principal contaminant of concern, making the removal action a nationally significant and precedent-setting removal. Also, paint containers, totes of unknown chemicals, suspected fuel oils and gasoline products, antifreeze, PCB lighting ballasts, mercury switches, and fluorescent bulbs were observed, in addition to many common household hazardous wastes (universal wastes). As a result of

the findings of the assessment, EPA proposed a removal action be conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), and 40 C.F.R. § 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) to abate or eliminate the immediate threats posed to public health, welfare, and the environment.

On January 26, 2017, EPA OSC, Kevin Turner; EPA's Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration LLC (ER, LLC); and Tetra Tech START performed a site walk to confirm the presence of ACWM in debris piles and RACM inside many of the buildings to determine whether these areas were safe to access and to develop a schedule and approach for removal work. The site walk consisted of a conducting a site reconnaissance, identifying ACWM and RACM by visual inspection, estimating the volume of ACWM in debris piles, and photographing and recording documentation of site features. Tetra Tech START also conducted a pre-removal site walk and radiation survey, utilizing a Ludlum Model 192 survey meter to ensure worker safety. A measurement of 12 to 52 micro-roentgens per hour ($\mu\text{R/hr}$) was established as an on-site background radiation level. No measurements taken from the debris piles or from inside site buildings exceeded the established background level. Due to the scattered and uncontrolled conditions of ACWM observed during previous Illinois EPA inspections, all site personnel were required to wear Level C personal protection equipment (PPE).

3.0 REMOVAL, TRANSPORTATION, AND DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIALS

From February 6 through September 21, 2017, EPA conducted removal activities involving consolidating, loading, removing, and disposing of ACWM from the site. During the removal action, Tetra Tech START monitored work activities for dust emissions and surface water runoff from wetting and dust suppression. Removal activities were performed by ER, LLC.

During removal activities, EPA maintained site security using the existing 10-foot high chain-link fence. EPA and Tetra Tech START performed daily perimeter inspections of the fence. This fence, along with another interior fence, had been constructed for site ingress/egress control and decontamination control. Additionally, EPA elected to retain the services of a third-party security provider to remain on site during evening hours and weekends for the project duration.

Because of the complexity of many buildings and the large site size, EPA contractors were required to pump extensive amounts of accumulated rain water from the basement of the Series “B” building to safely access and remove ACWM. Because the amount of accumulated water increased during seasonal rain events, it was decided to delay water pumping until the dry summer season in mid-June 2017. The Series “B” building required continuous pumping of accumulated rainwater for several weeks before EPA contractors were able to gain access. Pumping of the basement of Series “C” head house building was also required before ACWM removal could start. All pumped water was moved into the basement of Series “A” Bakery Tower Mix building.

The following sections describe the approach used for loading and disposing of asbestos-impacted construction debris and the bulk removal of asbestos-containing insulation materials. EPA also tasked START to document areas of inaccessible ACM as part of the 2017 removal action at the site (Table 3 Appendix B).

3.1 LOADING AND DISPOSAL OF PRE-EXISTING ASBESTOS-IMPACTED DEMOLITION DEBRIS

Extensive amounts of asbestos-impacted debris generated and left behind by others required special handling by EPA contractors (see photographs 2 and 3 in Appendix D). ERRS personnel used two fire hoses to provide dust suppression and wetting during consolidation and loading of construction and demolition debris. ERRS personnel also used two excavators, and a skid steer to manage the debris, separated the various scrap metal items found in debris piles, and loaded the ACM into lined dump trucks for disposal. Scrap metal was removed from both inside and outside of the buildings, decontaminated

with water, segregated from the ACM debris piles, and set off to the side within the site exclusion zone. EPA did not conduct scrap metal recovery operations. Asbestos-containing demolition debris spread across the ground and on concrete surfaces required ERRS to routinely wet the debris during handling and loading operations. Inside many buildings, existing and loose ACM was present on the ground. Asbestos-containing insulation found in garbage bags was wetted, double-bagged, and loaded in plastic-lined dump trailers. Before asbestos-containing debris was loaded, ERRS inspected the truck beds and installed a polyethylene liner measuring 0.006 inch in thickness (6-mil). Once installed, ERRS inspected the liner to verify that no tears were present. Using a fine mist of water, ERRS loaded asbestos-containing debris directly into plastic lined dump trailers using a tracked excavator with a thumb attachment. ERRS provided dust suppression at all times during loading operations using a hose and nozzle connected to a water hydrant. After trucks were loaded, ERRS workers sealed the top of the 6-mil burrito-style liner with spray adhesive at the truck sealing station. Asbestos warning labels were attached to the outside of the liner. ERRS inspected the liner before the truck departed to ensure it was properly sealed and undamaged during loading. Any small rips or tears were sealed with duct tape before the truck left the site. Asbestos signs and “Class 9 - Other Regulated Material (ORM) 2212” placards were fastened to the exterior cargo area of each truck prior to departure from the site. Loading and disposal operations of bulk asbestos-impacted construction demolition debris were conducted from February 15 through March 10, 2017.

ACM was transported for disposal to a State of Illinois asbestos-approved landfill, the Waste Management Inc., Five Oaks Landfill in Taylorville, Illinois. A total of 100 truckloads weighing 2195.90 tons, mostly in the form of brick or concrete, were collected for ACWM disposal (see Table 1 in Appendix B).

3.2 BULK REMOVAL OF ASBESTOS-CONTAINING INSULATION

From March 22, 2017, through September 14, 2017, glove bag removal techniques were primarily used for bulk removal of asbestos-containing insulation (except in areas that required containment for removal of asbestos-wrapped storage tanks used for facility steam-heat or edible fats used to shorten baked goods). Due to the size of the site, the number of buildings inspected, and the vast amount of asbestos pipe-wrap present, the glove bag approach was the primary asbestos removal technique employed. A large man-lift along with rented scaffolding was used to facilitate removal work and provide personnel on site with access to tall buildings, trundle equipment, and supplies. On March 21, 2017, ERRS assembled and affixed a debris chute onto the fourth floor of the Series “A” Bakery Mix Tower building, and on March 22, ERRS initiated asbestos removal on the eighth floor of the

building. ACWM within the glove-bag was double bagged before removal and was loaded into 40 cubic-yard roll-off-boxes. ERRS installed a 6-mil polyethylene liner and inspected the liner to verify that no tears were present. The roll-off-boxes were strategically placed next to a debris chute to facilitate loading of the double-bagged ACWM directly into the roll-off-box shipping container. Otherwise, double-bagged ACWM was loaded using a skid steer when the debris chute could not be used. ERRS provided dust suppression during loading operations, using a hose and nozzle connected to a water hydrant.

After the roll-off-boxes were loaded, ERRS workers sealed the top of the 6-mil burrito-style liner with spray adhesive at the truck sealing station. Asbestos warning labels were attached to the outside of the roll-off-boxes. ERRS inspected the liner before the truck departed to ensure it was properly sealed and undamaged during loading. Asbestos signs and Class 9 ORM 2212 placards were fastened to the exterior cargo area of each truck prior to departure from the site.

Bulk asbestos removal work was performed at the following locations:

- Series “A” Bakery Tower Mix Building on floors two, three, four, five, six, seven, and eight, including the basement, main floor of Bakery Mix, and the remnant sections Warehouses #7, #8, and #9.
- Series “B” Grocery Mix Building on floors two, three, four, and five including remnant sections on the main floor and basements of Warehouses #3, #4, #5 and #6. C Mill Building floors two and three and partial removal of floors three, four, five, six, seven, eight, and nine including the main floor Warehouse #6 and first and second floors of the Locker Rooms. The Forklift Shop and Truck Dump outbuildings were surveyed for asbestos but only contained articles of universal and other suspected hazardous waste containers.
- Series “C” A & B Mill Building on floors two, three, four, five, six, seven, and eight including the main floors and basements of Warehouses #1 and #2. Small-scale asbestos removal actions were completed inside the upper sections of Head House, Grain Storage, and Annex silos, including the basement of Bulk Storage Turbo Building.

A total of 29 roll-off-boxes containing 1,160 cubic-yards of bulk ACWM, mostly in the form of asbestos-containing pipe-wrap, were shipped for ACWM disposal (Table 2 in Appendix B). The bulk ACWM was transported for disposal to a State of Illinois asbestos-approved landfill at the Republic Services, Sangamon Valley Landfill, in Springfield, Illinois.

3.3 INACCESSIBLE ACM PIPE-WRAP INSULATION

Due to structural safety concerns created from many years of water damage, the fourth, fifth, sixth, seventh, eighth, and ninth floors of the Series “B” “C” Mill Building, could not be safely accessed by EPA contractors. The wood floors spanning across the concrete structure had extensive water damaged from leaking roofs and were deemed too large of a safety risk to attempt access by ERRS. EPA tasked Tetra Tech START to photo-document and estimate the amount of ACM that could not be removed. The OSC tasked Tetra Tech START to inventory the total amount of inaccessible asbestos-containing pipe-wrap that remained (Table 3 in Appendix B).

3.4 FINAL SITE INSPECTION FOR ASBESTOS

EPA, ERRS, and Illinois EPA conducted a final site walk on September 21, 2017. Care was taken to secure the perimeter fence and affix warning signs to deter unauthorized entry. The removal action was completed other than the accumulated amounts of hazardous waste materials securely stored temporarily inside Dock #107 and site personnel demobilized on September 22, 2017. At this time the Illinois EPA took back site control. All subsequent site visits conducted were to complete final disposition arrangements for hazardous materials as discussed further in Section 5.3.

4.0 AIR MONITORING

The following sections describe initial dust monitoring, perimeter dust monitoring, and asbestos air sampling performed by Tetra Tech START as part of the removal action at the site.

4.1 INITIAL DUST MONITORING

During site set-up and prior to ACM removal work, Tetra Tech START conducted air monitoring for total particulates at two locations around the perimeter of the site exclusion zone to develop baseline dust level data prior to the start of asbestos removal activities. Two Thermo Scientific MIE personal DataRam (pDR) pDR-1500 dust meters were used to collect particulate readings around the exclusion zone during removal activities. The location of the pDR was based on the daily prevailing winds, and the pDR was mounted in the breathing zone, in locations both upwind and downwind of the site command post. Tetra Tech START personnel initially conducted air monitoring for total particulates during site set-up activities on February 6 and 7, 2017. Baseline air monitoring was conducted on two dates during this period without an exceedance of the action level (AL) of 2,500 $\mu\text{g}/\text{m}^3$. The highest time-weighted average (TWA) concentration for total particulates was 193 $\mu\text{g}/\text{m}^3$ on February 6, 2017, due to the disturbance of particulates by truck traffic within the safety support zone.

The pDR monitored total particulate concentrations and provided TWA particulate concentrations during daytime site mobilization operations. A total particulate AL of 2,500 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) was established. An alarm on the unit was programmed to alert EPA and Tetra Tech START of exceedances of the 2,500 $\mu\text{g}/\text{m}^3$ AL. On February 7, 2017, pDR particulate monitoring was replaced by DustTrak™ DRX, aerosol monitors, Model 8533, using Viper wireless communication to a host computer. Section 4.2.1 describes the real-time air monitoring activities using DustTrak instrumentation.

Tetra Tech START also monitored and recorded weather conditions, conducted real-time air monitoring for particulate matter using the Viper communication system, and collected occasional perimeter air samples for laboratory analysis via phase contrast microscopy (PCM). The PCM results were used to evaluate whether airborne fiber concentrations were migrating from the site during removal activities. Section 4.2.2 describes the asbestos air sampling activities.

4.2 PERIMETER AIR SAMPLING DURING ASBESTOS REMOVAL ACTIVITIES

Tetra Tech START conducted real-time perimeter air monitoring for particulates during the ACWM removal activities using DustTrak™ DRX, aerosol monitor Model 8533, with the EPA Viper wireless communication system connected to a host computer along with co-located Gillian AirCon2 high-volume air samplers (Tetra Tech 2017).

In addition to real-time particulate monitoring, Tetra Tech START documented ERRS removal work, including dust suppression measures, to ensure ERRS complied with the no visible emissions standard provided by the NESHAP for Asbestos, 40 CFR Part 61.150 (a).

Asbestos air sampling was also conducted at designated locations to identify airborne fiber concentrations for receptors on and off site. Perimeter air monitoring was performed 3 days per week (when START was on site) at the locations (shown on Figure 5 in Appendix A).

4.2.1 Real-Time Air Monitoring using DustTraks

Real-time air monitoring was conducted in and around the perimeter of the exclusion zone by START personnel throughout removal activities. Real-time air monitoring was described in detail in the Tetra Tech air monitoring plan (Tetra Tech 2017). The purpose of the monitoring was to measure particulate levels in and around the site and fugitive particulates leaving the exclusion zone. Real-time air monitoring was conducted 3 days per week during removal action activities. Data was captured digitally via the instrument; recorded to the EPA Emergency Response Team (ERT) Viper 900 MHz wireless communication system throughout the monitoring period; and reviewed throughout the day for occasional spikes in total particulates. DustTraks were deployed to measure particulate levels and were configured to analyze for total particulates. All real-time air monitoring equipment was calibrated or checked for alarms on a daily basis. Equipment maintenance was also performed on site as needed.

Real-time air monitoring with DustTraks began with monitors positioned within and near the perimeter of the exclusion zone. As site activities evolved, air monitors were moved based on daily site activities. Primary air monitoring stations were mounted on tripod stands at the following four locations: within the safety support zone, on the southwestern side of the exclusion zone perimeter near the site main entrance, off site on the western side at a former employee parking lot near a residential home, and off of 15th Street on the northwestern side of the exclusion zone perimeter. A map showing common air monitoring locations is provided as Figure 5 in Appendix A. All air monitoring equipment was

connected via 900 MHz wireless telemetry to a site host computer, which was used to send data to the EPA ERT via EPA's VIPER Survey Controller software. Monitoring data were stored in each instrument's internal memory and also on a secure server managed by ERT.

During site activities, it was observed that DustTrak data transmitted via the Viper 900 MHz telemetry system introduced erroneous data into total particulate matter readings. This data took the form of anomalous data spikes that were typically orders of magnitude greater than valid particulate monitoring data, as well as negative readings. Tetra Tech developed a data filtering procedure to identify and replace data that comprise the anomalous spikes (Tetra Tech 2017b). The analysis of all air monitoring data was performed by comparing results for any continuous 15-minute time weighted average greater than or equal to the AL of 2.5 mg/m³.

On February 17, 22, 24, March 6, and May 4, 2017, anomalous data spikes occurred with the instruments registering total particulates of 507.78, 3009.94, 4.89, 22.65, and 2.83 mg/m³ respectively. However, the resultant data analysis performed by Tetra Tech START produced actual levels of 0.0137, 0.0522, 0.0269, 0.0162, and 0.0112 mg/m³ respectively. Ultimately, Tetra Tech START review of the entire DustTrak data package has determined that all analyzed 15-minute TWA results were below the AL as defined the Air Monitoring Plan (Tetra Tech 2017). The total particulate analysis summary results can be found in Table 8 in Appendix B. The data contained in Table 8 represents the maximum 15-minute TWA recorded for each day on which particulate monitoring was conducted.

Air monitoring stations for total particulates were located primarily on the northwestern, western, southwestern and southern sides of the site. Descriptions of the various perimeter air monitoring stations (shown on Figure 5 in Appendix A) are provided below.

- Station 1 – Located at the southern border next to the temporary field office trailers, along the northern edge of the public alleyway north of East Matheny Avenue (permanent air monitoring station location)
- Station 2 – Located outside the southwestern security fence on the west side of the debris cleanup, near the main site entrance gate off of East Phillips Street (permanent air monitoring station location)
- Station 3 – Located on the western side near residential homes in an area that formerly served as an employee parking lot (with nearby alternate location used on occasion as directed by the OSC)
- Station 4 – Located on the northwestern side along 15th Street just outside the western security fence (with nearby alternate used on occasion as directed by the OSC)
- Station 5 – Located near the ERRS-provided decontamination trailer (with nearby alternate used on occasion as directed by the OSC)

4.2.2 Air Sampling During Asbestos Removal Activities

Tetra Tech START conducted air sampling for asbestos fibers during the ACWM removal activities using Gillian AirCon2 high-volume air samplers (Tetra Tech 2017). Air sampling was conducted at designated locations to identify airborne fiber concentrations for receptors on and off site. Air samples were collected at the locations listed below (shown on Figure 5 in Appendix A).

- Station 1 – Located at the southern border next to the temporary field office trailers, along the northern edge of the public alleyway North of East Matheny Avenue (permanent air monitoring station location next to the field office trailers and normally considered downwind due to prevailing winds from the west, except considered downwind when winds were from the south)
- Station 2 – Located outside the southwestern security fence on the west side of the debris cleanup, near the main site entrance gate off of East Phillips Street (permanent air monitoring station location considered to monitor and be protective of homeowners living on East Phillips Street)
- Station 3 – Located on the western side near residential homes in an area that formerly served as an employee parking lot (with nearby alternate location used on occasion as directed by the OSC)
- Station 4 – Located on the northwestern side along 15th Street just outside the western security fence (with nearby alternate used on occasion as directed by the OSC)
- Station 5 – Located near the ERRS-provided decontamination trailer (used on occasion as directed by the OSC)
- Station 6 – Located inside Dock #107 (used on one occasion as directed by the OSC). This station was placed in location was where all site hazardous materials and universal wastes were: (a) hazardous categorization identified [Haz-Cat]; (b) composited together by compatibility, (c) re-containerized if necessary; and (d) temporarily stored until final disposition arrangements)
- Station 7 – Located under the remaining roof section of Warehouse #7 (used on one occasion as directed by the OSC). This station was placed in location was where all site hazardous materials including universal wastes were: (a) identified by hazardous categorization [Haz-Cat]; (b) composited together by compatibility; (c) re-containerized if necessary; and (d) temporarily stored until final disposition arrangements)

Air sampling was conducted 3 days per week during removal activities from February 8 to September 28, 2017. EPA established the site-specific action level of 0.001 fiber per cubic centimeter (f/cc) for industrial areas in accordance with the Office of Solid Waste and Emergency Response (OSWER) Directive #9200.0-68, Framework for Investigating Asbestos-Contaminated Superfund Sites (OSWER 2008). Tetra Tech START collected 110 air samples during ACWM removal activities. The air samples

were submitted under chain of custody, to QuanTEM Laboratories in Oklahoma City, Oklahoma, for PCM analysis in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7400 (NIOSH 1994).

Fiber counts for all but nine of the 110 samples analyzed by PCM were below the 0.001 fibers per cubic centimeter (f/cc) action level, with concentrations ranging from 0.00103 f/cc to 0.00307 f/cc.

One sample was tested by transmission electron microscopy (TEM) analysis in accordance with NIOSH Method 7402 (NIOSH 1994b). Asbestos fibers were not detected in this sample, which had a detection limit of <0.000424 f/cc.

Figure 5 in Appendix A shows the asbestos air sampling locations, and Table 4 in Appendix B summarizes the PCM and TEM air sampling results.

Additional air samples were collected by ER, LLC, for background air quality and OSHA worker safety. These samples are not discussed in this report.

5.0 IDENTIFICATION, BULK CONSOLIDATION, REMOVAL AND DISPOSAL OF ALL WASTE CONTAINERS

The following section describes requirements of waste container identification, universal waste, and remaining hazardous wastes requiring commercial disposition at EPA-approved treatment, storage, and disposal facilities.

During asbestos removal, the ERRS foreman assessed the condition of all hazardous waste containers and moved them to an appropriate area until the end of each work day. Any weathered, damaged, or leaking container discovered by the ERRS foreman was placed on plastic sheeting or re-containerized. At a convenient time, ERRS technicians used the skid steer to trundle the containers to a secure area and safely store them within the confines of the secured fenced area. All universal wastes and suspected hazardous materials discovered were sorted, grouped, and safely staged inside Warehouse #7 or inside the locked confines of Dock #107.

On September 7, 2017, from prior arrangements made by the OSC, five compressed gas cylinders belonging to Linde Gas LLC were removed and transported for evacuation and disposal to the Linde Air Company facility located at 1351 West Jefferson Street in Springfield, Illinois.

On September 29, 2017, from prior arrangements made by the OSC, one pallet of non-hazardous, commercial grade laundry bleach belonging to ECOLAB was removed and transported by Tradebe Environmental Services for treatment at their facility located at 4343 Kennedy Avenue in East Chicago, Indiana, and then disposed at the Waste Management Inc., Laraway RDF landfill in Peoria, Illinois.

On October 20, 2017, from prior arrangements made by the OSC, one fire extinguisher containing Halon was picked-up by Getz Fire Equipment Company located at 1615 S.W. Adams Street in Peoria, Illinois, for chemical reuse.

5.1 WASTE IDENTIFICATION

On August 15, 2017, Tetra Tech START initiated hazard characterization (haz-cat) identification of 23 containers staged inside Warehouse #7 which were filled or partially contained unknown chemical contents (Table 9 in Appendix B). During the period of August 15 through September 19, 2017, Tetra Tech START identified materials by container label when the label was intact, or completed haz-cat-identification when the container contents were unknown. Tetra Tech START then emptied, after which ERRS consolidated, bulked, or solidified the contents as appropriate. All damaged, rusted, and RCRA

empty containers were crushed by ERRS using the track-hoe, and then placed into 40 cubic yard roll-off-boxes for co-disposal with the ACM pipe-wrap insulation waste stream.

Due to the food-grade production capabilities of Pillsbury Mills, many containers were plastic, hand-pump operated, spray soap cleaners or consumer packaged lubricating oils. Liquid soap cleaners were utilized by ERRS for boot-wash decontamination. The majority of the easily identified lubricating oil containers were appropriately bulked together. Weathered, rusty metal paint cans were first decanted of liquids with the remaining solids emptied by hand then attended by adding available oil-dry and set-aside to air-dry. Spray paint containers with contents were accumulated for lab-pack disposal with the empties added to the 40 cubic-yard roll-off-boxes. In all, 622 containers, many of which were either small plastic tubes, squeeze bottles, quart-sized plastic, 5-gallon pails, or various other sizes of lubricating oils, were co-mingled into plastic chemical totes.

Any unknown chemical containers were haz-cat identified and co-mingled with like hazard classes into the appropriate containers for safe temporary storage. Various materials ultimately required special handling and disposition as a lab pack (Table 6 in Appendix B).

After ERRS completed competitive bidding, arrangements were made with two different disposal vendors, and disposition shipping arrangements were made to remove all hazardous wastes from the site as described in Sections 5.2 and 5.3.

5.2 UNIVERSAL HAZARDOUS WASTE DISPOSITION ARRANGEMENTS

Universal wastes, including mercury-containing fluorescent lightbulbs, lead acid batteries, and polychlorinated biphenyl (PCB)-containing lighting ballasts were inventoried for off-site disposal. Due to competitive bid requirements, Tetra Tech START created an inventory of all non-hazardous and hazardous wastes for commercial disposition arrangements. On September 22, 2017, the OSC met on site with representatives of Republic Services to sign the required shipping documents and remove from secured storage the universal hazardous waste materials (see Table 5 in Appendix B).

5.3 DISPOSITION ARRANGEMENTS FOR ALL OTHER HAZARDOUS WASTE

On November 1, 2017, the OSC and two ERRS technicians returned to the site in support of the removal of the remaining hazardous waste materials, which had been securely stored within Dock #107.

Representatives from Veolia Environmental Services arrived on site to safely package, handle, ship, and transport all remaining wastes. This shipment was comprised of the lab-pack wastes and bulked waste oils (Table 7 of Appendix B). The OSC signed the required waste manifest documents the same day.

6.0 CONCLUSIONS

The scope of work for this removal action consisted of the following: (1) consolidate and remove asbestos-impacted building materials determined to be a threat to human health and the environment; (2) remove, transport, and dispose of all ACM/PACM/ACWM to an EPA-approved disposal facility in accordance with the EPA Off-site Rule (40 CFR. § 300.440); (3) conduct high-volume asbestos air sampling and real-time air monitoring for total particulates with DustTraks connected to the Viper wireless communications system; and (4) haz-cat identify 23 unknown containers and characterize by hazardous classes all waste container contents in support of ERRS waste disposal actions.

During the period of February 6 through September 21, 2017, EPA conducted asbestos removal activities involving consolidating, loading, removing, and disposing of ACWM from the site. Removal of ACM and ACWM was successful in mitigating threats to public health, welfare, and the environment; however, due to safety concerns, a minor amount of ACM (approximately 200 linear feet) still remains on site inside the Pillsbury Mills “C” Mill Building in the form of pipe wrap upon existing piping. Removal of ACWM and hazardous waste was completed in accordance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), to abate or eliminate the immediate threats posed to public health and the environment. Total quantities of waste removed from site included:

- 100 truckloads containing 2,195.63 tons of ACWM debris were transported to the landfill for disposal
- 29 truckloads containing 1,160 cubic yards of ACWM pipe-wrap insulation were transported to the landfill for disposal
- 1 truckload of universal waste materials was transported for off-site reclamation disposal by Republic Services
- 1 truckload of hazardous waste materials was transported for off-site disposal by Veolia Environmental Services

REFERENCES

- Bing Maps Hybrid. 2013. 1525 East Phillips Street, Map of Springfield, Illinois.
- National Institute for Occupational Safety and Health (NIOSH). 1994a. “Asbestos and Other Figures by PCM” Method 7400. Issue 2. August 15.
- National Institute for Occupational Safety and Health (NIOSH). 1994b. “Asbestos by TEM” Method 7402. Issue 2. August 15.
- Office of Solid Waste and Emergency Response (OSWER). 2008. Framework for Investigating Asbestos-Contaminated Superfund Sites. Directive #9200.0-68. September.
- Tetra Tech. 2017a. “Draft Air Monitoring Plan – Pillsbury Mills Site.” February 6.
- Tetra Tech 2017b. “Technical Memorandum: USS Lead Particulate Matter VIPER Data Filter Development Methodology.” March, 10.
- U.S. Geological Survey. 1994. 7-5 Minute Topographic Map of Springfield, Illinois, Quadrangle.

APPENDIX A

FIGURES

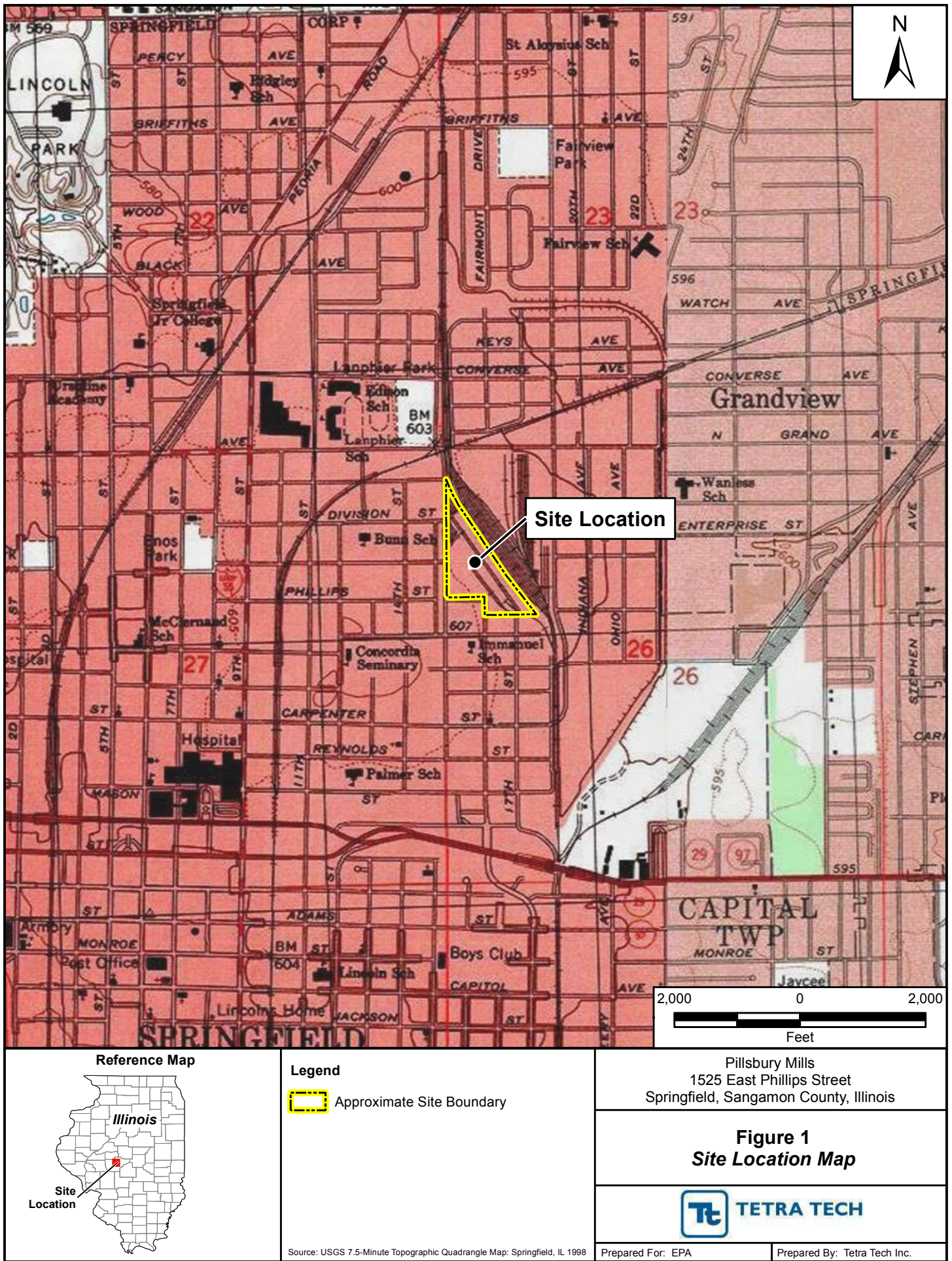
Figure 1: Site Location Map

Figure 2: Site Layout Map

Figure 3: Building Series Layout

Figure 4: Site after Partial Demolition

Figure 5: Air Monitoring Stations with Alternates






bing™

Reference Map



Legend

 Approximate Site Boundary

Source: Bing Maps Hybrid 2013

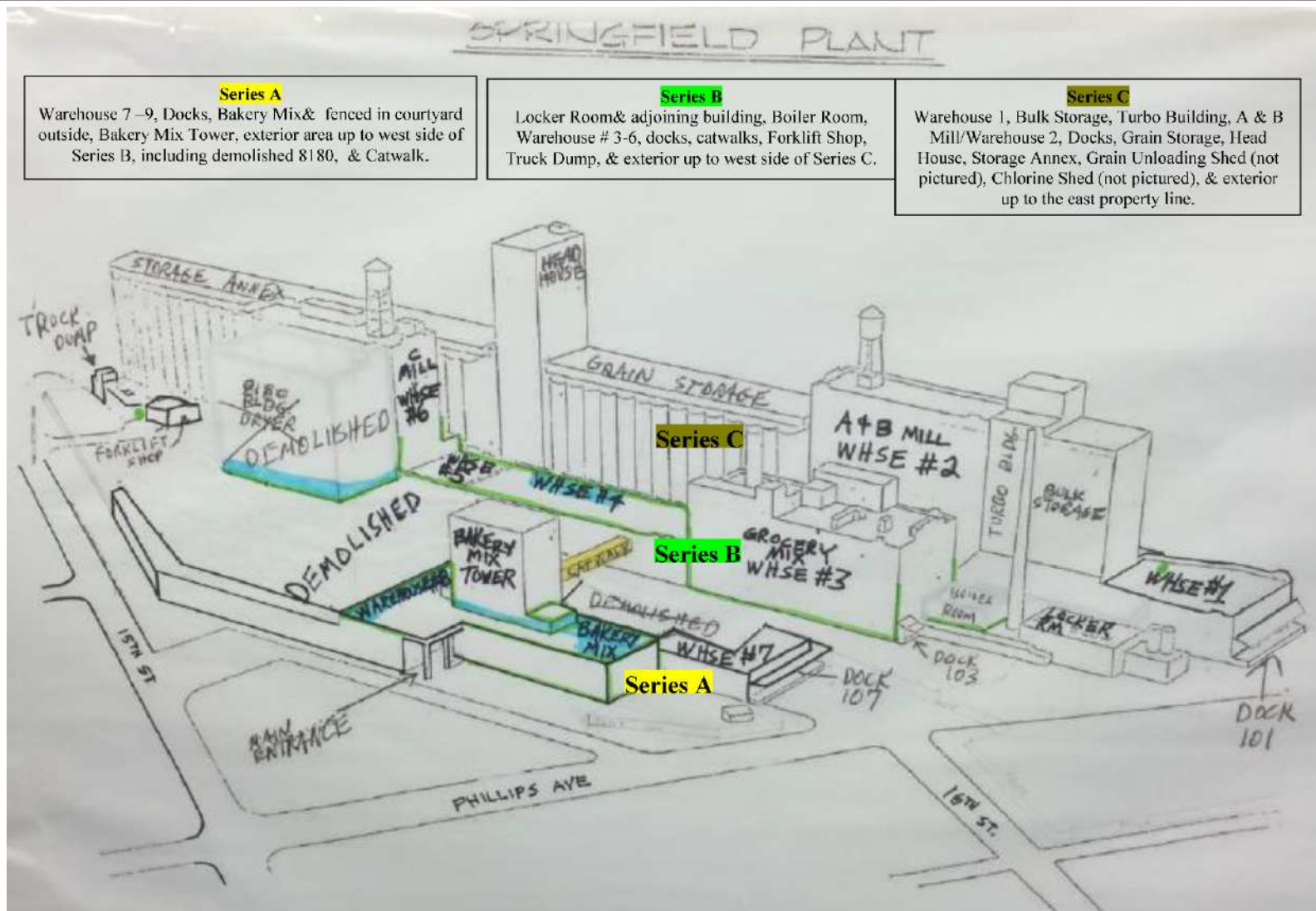
Pillsbury Mills
1525 East Phillips Street
Springfield, Sangamon County, Illinois

Figure 2 Site Layout Map



Prepared For: EPA

Prepared By: Tetra Tech Inc.



Reference Map



Pillsbury Mills
1525 East Phillips Street
Springfield, Sangamon County, Illinois

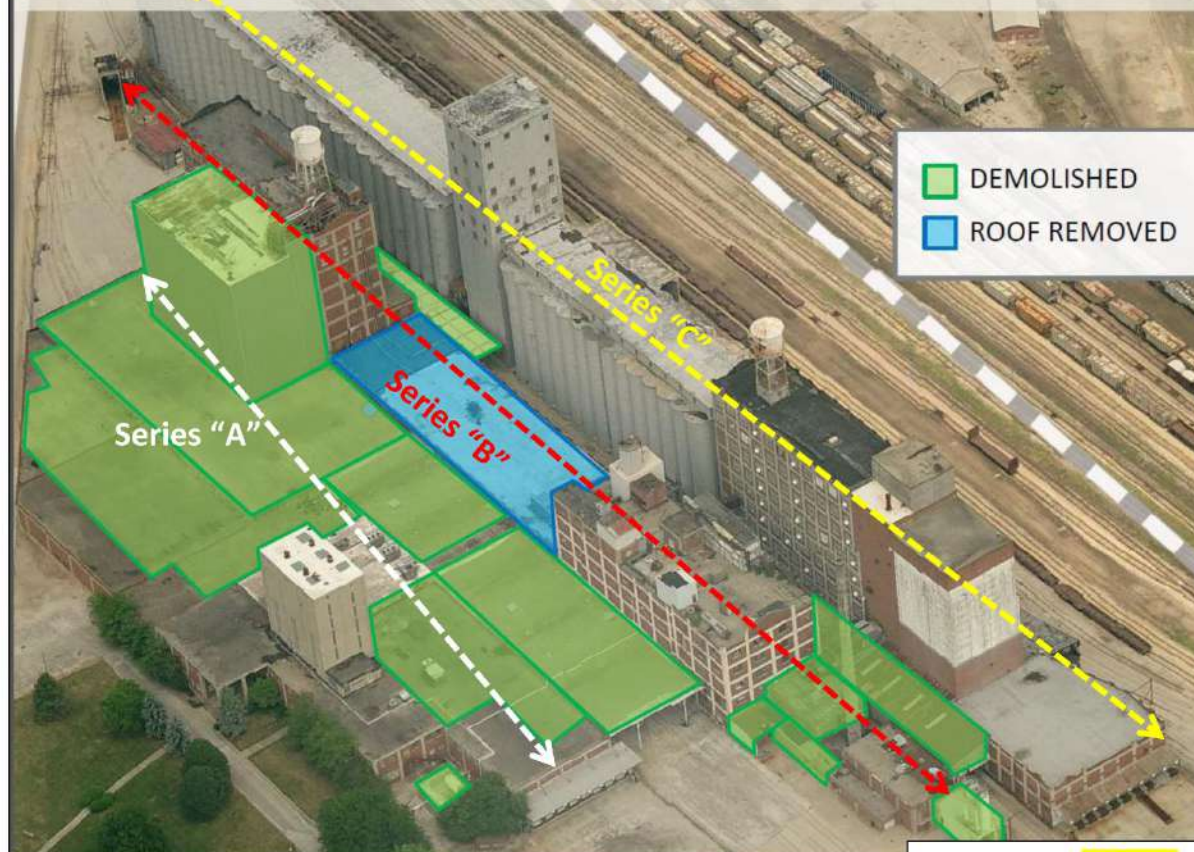
Figure 3
Building Series Layout
Provided By Illinois EPA



Prepared For: EPA

Prepared By: Tetra Tech Inc.

Pillsbury Mills after demolition



Series A

Warehouse 7 –9, Docks, Bakery Mix& fenced in courtyard outside, Bakery Mix Tower, exterior area up to west side of Series B, including demolished 8180 & Catwalk.

Series B

Locker Room& adjoining building, Boiler Room, Warehouse # 3-6, docks, catwalks, Forklift Shop, Truck Dump, & exterior up to west side of Series C.

Series C

Warehouse 1, Bulk Storage, Turbo Building, A & B Mill/Warehouse 2, Docks, Grain Storage, Head House, Storage Annex, Grain Unloading Shed (not pictured), Chlorine Shed (not pictured), & exterior up to the east property line

Reference Map



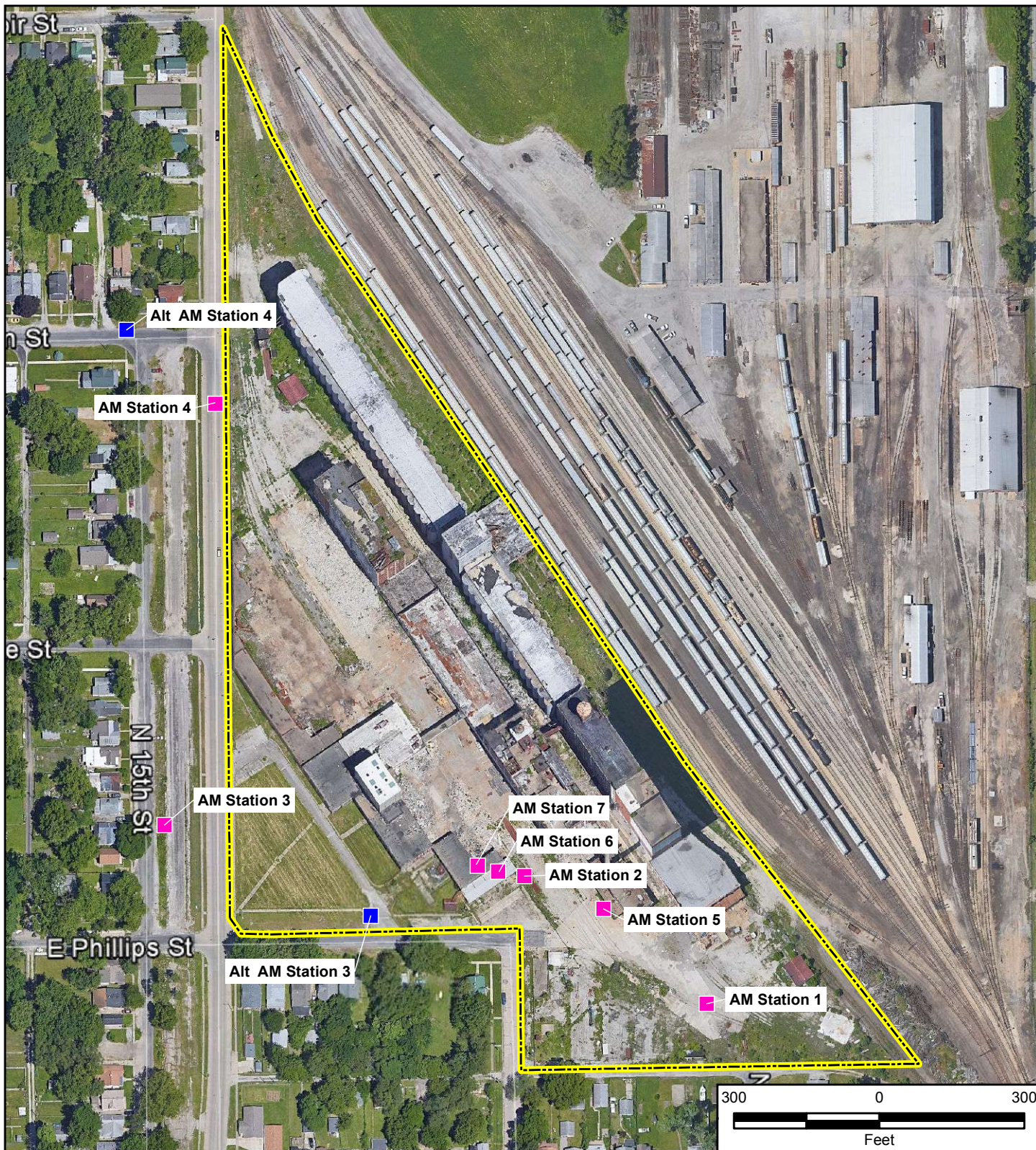
Pillsbury Mills
1525 East Phillips Street
Springfield, Sangamon County, Illinois

Figure 4 **Pillsbury Mills Site After** **Partial Demolition**



Prepared For: EPA

Prepared By: Tetra Tech Inc.



Legend

- Air Monitoring Station
- Alternative Air Monitoring Station
- Approximate Site Boundary

Pillsbury Mills
1525 East Phillips Street
Springfield, Sangamon County, Illinois

Figure 5
Air Monitoring Stations
with Alternates



Prepared For: EPA

Prepared By: Tetra Tech Inc.

APPENDIX B

DATA SUMMARY TABLES

Table 1: Transportation and Disposal Log - ACWM Debris

Table 2: Transportation and Disposal Log – ACWM Pipe-wrap

Table 3: Inventory of Remaining Inaccessible ACM Pipe-wrap,
“C” Mill Building Warehouse #6

Table 4: Perimeter Air PCM and TEM Sampling Results

Table 5: Universal Waste Disposal Inventory

Table 6: Lab Pack and Other Hazardous Waste Materials Inventory

Table 7: Lab Pack Disposal Summary

Table 8. Data Analysis Summary of DustTrak Results, 15-minute Time Weighted Average

Table 9: Unknown Chemical Containers Haz-Cat Identified

Table 1
Transportation and Disposal Log
(ACWM Debris)
Pillsbury Mills Site

Manifest Count	Truck Number	Manifest Number	Date Shipped	Tons per Load (Friable)
1	982	5503944	2/15/2017	15.71
2	245	5503945	2/15/2017	27.83
3	982	5503946	2/15/2017	27.40
4	245	5503947	2/15/2017	22.40
5	982	5503948	2/16/2017	17.52
6	982	5503949	2/17/2017	22.61
7	245	5503950	2/17/2017	24.31
8	244	5503951	2/16/2017	21.33
9	244	5503952	2/16/2017	20.06
10	245	5503953	2/16/2017	24.34
11	982	5503954	2/16/2017	21.26
12	245	5503955	2/16/2017	24.93
13	982	5503956	2/16/2017	23.20
14	245	5503957	2/17/2017	25.46
15	244	5503958	2/17/2017	22.89
16	244	5503959	2/17/2017	20.39
17	982	5503960	2/17/2017	24.27
18	245	5503961	2/17/2017	24.26
19	244	5503962	2/17/2017	20.92
20	982	5503963	2/17/2017	20.29
21	244	5503964	2/21/2017	23.05
22	982	5503965	2/21/2017	23.11
23	982	5503966	2/21/2017	21.55
24	244	5503967	2/22/2017	20.81
25	245	5503968	2/22/2017	24.25
26	245	5503969	2/23/2017	22.00
27	982	5503970	2/22/2017	24.31
28	271	5503971	2/22/2017	24.20
29	245	5503972	2/22/2017	22.41
30	982	5503973	2/22/2017	21.98
31	244	5503974	2/22/2017	20.66
32	261	5503975	2/22/2017	23.47
33	245	5503976	2/22/2017	20.88
34	982	5503977	2/22/2017	21.37
35	244	5503978	2/22/2017	19.10
36	261	5503979	2/22/2017	23.18
37	982	5503980	2/23/2017	22.80
38	244	5503981	2/23/2017	20.73
39	261	5503982	2/23/2017	21.02
40	982	5503983	2/23/2017	21.63
41	244	5503984	2/23/2017	21.28
42	261	5503985	2/23/2017	21.64
43	982	5503986	2/23/2017	19.70
44	244	5503987	2/23/2017	20.10
45	261	5503988	2/23/2017	20.48
46	245	5503989	2/23/2017	23.92
47	244	5503990	2/23/2017	18.82
48	982	5503991	2/24/2017	17.94

Table 1
Transportation and Disposal Log
(ACWM Debris)
Pillsbury Mills Site

Manifest Count	Truck Number	Manifest Number	Date Shipped	Tons per Load (Friable)
49	261	5503992	2/24/2017	20.98
50	245	5503993	2/24/2017	21.66
51	244	5503994	2/24/2017	19.32
52	244	5503995	2/24/2017	17.30
53	982	5503996	2/24/2017	18.35
54	245	5503997	2/24/2017	23.80
55	251	5503998	2/24/2017	22.47
56	244	5503999	2/24/2017	21.81
57	982	5504000	2/24/2017	24.30
58	245	5504001	2/24/2017	25.93
59	251	5504002	2/24/2017	29.06
60	245	5504003	3/6/2017	17.24
61	982	5504004	3/6/2017	18.44
62	261	5504005	3/6/2017	17.91
63	244	5504006	3/6/2017	21.94
64	245	5504007	3/6/2017	23.27
65	982	5504008	3/6/2017	20.67
66	261	5504009	3/7/2017	23.68
67	244	5504010	3/7/2017	20.57
68	245	5504011	3/7/2017	21.64
69	982	5504012	3/7/2017	22.52
70	245	5504013	3/7/2017	25.82
71	982	5504014	3/7/2017	17.54
72	244	5504015	3/7/2017	19.65
73	261	5504016	3/7/2017	19.69
74	245	5504017	3/7/2017	19.42
75	982	5504018	3/7/2017	22.96
76	244	5504019	3/7/2017	22.96
77	261	5504020	3/7/2017	24.15
78	245	5504021	3/8/2017	21.03
79	982	5504022	3/8/2017	19.92
80	244	5504023	3/8/2017	21.54
81	261	5504024	3/8/2017	19.28
82	245	5504025	3/8/2017	22.05
83	982	5504026	3/8/2017	19.17
84	261	5504027	3/8/2017	19.32
85	244	5504028	3/8/2017	18.33
86	245	5504029	3/8/2017	18.94
87	982	5504030	3/8/2017	19.65
88	261	5504031	3/8/2017	19.88
89	244	5504032	3/8/2017	22.38
90	245	5504033	3/9/2017	27.82
91	982	5504034	3/9/2017	24.26
92	261	5504035	3/9/2017	20.66
93	244	5504036	3/9/2017	28.57
94	982	5504037	3/9/2017	22.26
95	244	5504038	3/9/2017	22.82
96	982	5504039	3/9/2017	24.85

Table 1
Transportation and Disposal Log
(ACWM Debris)
Pillsbury Mills Site

Manifest Count	Truck Number	Manifest Number	Date Shipped	Tons per Load (Friable)
97	244	5504040	3/9/2017	25.90
98	982	5504041	3/9/2017	25.28
99	244	5504042	3/9/2017	27.09
100	982	5504043	3/10/2017	21.81

Total Tons ACWM Debris 2,195.63

Table 2
Transportation and Disposal Log – ACWM Pipe-Wrap
Republic Services, Sangamon Valley Landfill
2565 Sand Hill Road, Springfield, Illinois 62707
Pillsbury Mills Site

Manifest Sequence	Manifest Number	Date Shipped	Cubic Yards per Load (Friable)	Weight Ticket Number	Tons
1	MP5-24-01	4/5/2017	40	1015263	8.73
2	MP5-24-02	4/20/2017	40	1016279	9.24
3	MP5-24-03	4/21/2017	40	1016380	4.79
4	MP5-24-04	4/24/2017	40	1016554	11.2
5	PM5-24-05	4/27/2017	40	1016776	21.29
6	PM5-24-06	4/27/2017	40	1016787	10.65
7	PM5-24-07	4/27/2017	40	1016804	12.64
8	PM5-24-08	4/28/2017	40	1016857	10.03
9	PM5-24-09	5/1/2017	40	1016954	4.34
10	PM5-24-10	5/3/2017	40	1017120	9.3
11	PM5-24-11	5/3/2017	40	1017127	7.12
12	PM5-24-12	5/5/2017	40	1017279	8.12
13	PM5-24-13	5/5/2017	40	1017291	8.47
14	PM5-24-14	5/8/2017	40	1017375	5.06
15	PM5-24-15	5/10/2017	40	1017583	5.34
16	PM5-24-16	5/11/2017	40	1017712	5.23
17	PM5-24-17	5/17/2017	40	1018105	4.35
18	PM5-24-18	5/23/2017	40	1018478	5.76
19	PM5-24-19	6/2/2017	40	1019200	4.99
20	PM5-24-20	6/19/2017	40	1020410	9.16
21	PM5-24-21	6/29/2017	40	1021212	9.88
22	PM5-24-22	7/21/2017	40	1022869	6.8
23	PM5-24-23	7/27/2017	40	1023208	8.8
24	PM5-24-24	8/4/2017	40	1023752	9.33
25	PM5-24-25	8/11/2017	40	1024384	9.3
26	PM5-24-26	8/22/2017	40	1025225	6.71
27	PM5-24-27	8/30/2017	40	1025755	6.11
28	PM5-24-28	9/8/2017	40	1026295	5.98
29	PM5-24-29	9/21/2017	40	1027231	5.48

Total Cubic Yards 1160

Table 3
Inventory of Remaining Inaccessible ACM Pipe-wrap
"C" Mill Building Warehouse #6
Pillsbury Mills Site

Floor Location	Description	Pipe Diameter (In.)	Length (Ft.)	Total Length (Ft.)
4th Floor	2 Vertical pipe runs	2	12	24
5th Floor	3 Vertical pipe runs	2	12	36
" "	1 Vertical pipe run	2	6	6
6th Floor	1 Vertical pipe run	2	12	12
" "	1 Vertical pipe run	2	3	3
7th Floor	3 Vertical pipe runs	2	12	36
8th Floor	2 Vertical pipe runs	2	12	24
9th Floor	1 Horizontal pipe run	1	15	15
" "	1 Vertical pipe run	1	10	10
" "	1 Horizontal pipe run	8	34	34
" "	1 Vertical pipe run	8	6	6
Total feet				206

Table 4
Perimeter Air PCM and TEM Sampling Results
Pillsbury Mills Site

Sample ID	Air Monitoring Station Location	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Segment Volume (l)	Total Sample Volume (l)	PCM Results (f/cc)	Method Detection Limit (f/cc)
						Initial	Final	Average				
PM-S01-020817	Station 1	001	9:16	14:50	334	22.51	21.50	22.01	7349.7	7349.7	<0.000367	0.000367
PM-S02-020817	Station 2	002	8:00	14:55	415	23.42	22.61	23.01	9549.6	9549.6	0.000309	0.000281
PM-S03-020817	Station 3	003	8:20	15:02	402	21.16	21.70	21.43	8613.6	8613.7	<0.000312	0.000312
PM-S04-020817	Station 4	004	8:47	15:57	430	22.47	20.50	21.49	9239.8	9239.8	0.000319	0.000291
PM-S01-020917	Station 1	001	8:35	16:25	470	22.48	13.32	17.90	8413.2	8413.2	<0.000320	0.00032
PM-S02-020917	Station 2	002	8:18	16:16	478	23.42	19.88	21.65	10346.3	10346.3	<0.000260	0.00026
PM-S03-020917	Station 3	003	8:09	16:06	477	25.53	23.49	24.51	11691.2	11691.2	<0.000230	0.00023
PM-S04-020917	Station 4	004	7:55	16:02	487	34.46	10.86	22.66	11035.2	11035.2	Occluded	NA
PM-S01-021017	Station 1	001	7:50	16:20	510	25.11	23.45	24.28	12382.0	12382.0	0.000317	0.000218
PM-S02-021017	Station 2	002	8:41	16:25	464	23.42	19.88	21.65	10043.3	10043.3	Occluded	NA
PM-S03-021017	Station 3	003	8:35	16:25	470	26.36	19.36	22.86	10743.3	10743.3	Occluded	NA
PM-S04-021017	Station 4	004	8:10	14:41	391	29.68	27.17	28.42	11113.0	11113.0	Occluded	NA
PM-S01-021317	Station 1	001	9:20	16:22	422	19.06	18.18	18.62	7858.5	7858.5	<0.000342	0.000342
PM-S02-021317	Station 2	002	9:30	16:37	427	21.85	18.99	20.42	8720.2	8720.2	0.000338	0.000309
PM-S03-021317	Station 3	003	9:40	16:49	429	21.51	19.15	20.33	8721.4	8721.4	0.00045	0.000207
PM-S04-021317	Station 4	004	9:50	17:20	450	21.91	17.77	19.84	8926.2	8926.2	Occluded	NA
PM-S01-021417	Station 1	001	7:45	16:20	515	21.65	21.01	21.33	10984.7	10984.7	Occluded	NA
PM-S02-021417	Station 2	002	8:29	16:22	473	21.26	19.47	20.36	9631.5	9631.5	Occluded	NA
PM-S03-021417	Station 3	003	8:02	14:07	365	24.27	22.59	23.43	8551.6	8551.6	<0.000314	0.000314
PM-S04-021417	Station 4	004	7:30	14:15	405	21.34	20.88	21.11	8547.7	8547.7	Occluded	NA
PM-S01-021517	Station 1	001	7:47	15:31	464	22.34	21.22	21.78	10105.9	10105.9	Occluded	NA
PM-S02-021517	Station 2	002	7:49	15:40	471	20.99	19.19	20.09	9463.1	9463.1	0.00031	0.000284
PM-S03-021517	Station 3	003	7:55	15:50	475	22.51	17.54	20.03	9512.3	9512.3	Occluded	NA
PM-S04-021517	Station 4	004	7:58	16:00	482	22.68	19.93	21.30	10267.6	10268	Occluded	NA
PM-S01-021617	Station 1	001	7:40	15:40	480	22.58	20.27	21.42	10282.6	10282.6	Occluded	NA
PM-S02-021617	Station 2	002	7:45	15:45	480	21.09	19.51	20.30	9744.5	9744.5	Occluded	NA
PM-S03-021617	Station 3	003	7:50	15:50	480	17.52	14.50	16.01	7684.3	7684.3	Occluded	NA
PM-S04-021617	Station 4	004	7:55	16:00	485	20.50	18.46	19.48	9448.3	9448.3	Occluded	NA
PM-S01-022117	Station 1	001	9:44	16:10	386	21.79	20.19	20.99	8101.2	8101.2	0.000788	0.000332
PM-S02-022117	Station 2	002	9:50	16:25	395	21.13	19.79	20.46	8080.9	8080.9	<0.000332	0.000332
PM-S03-022117	Station 3	003	9:55	16:20	385	22.75	18.87	20.81	8011.7	8011.7	Occluded	NA
PM-S04-022117	Station 4	004	9:55	16:15	380	22.12	21.27	21.70	8244.3	8244.3	Occluded	NA
PM-S01-022217	Station 1	001	7:27	16:20	533	21.57	19.53	20.55	10951.6	10951.6	Occluded	NA
PM-S02-022217	Station 2	002	7:30	16:02	512	20.78	19.71	20.25	10366.7	10366.7	Occluded	NA
PM-S03-022217	Station 3	003	7:35	16:10	515	21.85	17.72	19.79	10189.8	10189.8	Occluded	NA
PM-S04-022217	Station 4	004	7:40	16:15	515	19.44	20.10	19.77	10182.1	10182.1	Occluded	NA
PM-S01-022317	Station 1	001	7:25	16:00	515	21.68	19.88	20.78	10700.7	10700.7	Occluded	NA
PM-S02-022317	Station 2	002	7:30	16:09	519	21.41	18.51	19.96	10359.2	10359.2	0.000284	0.00026
PM-S03-022317	Station 3	003	7:40	16:15	515	20.32	18.69	19.50	10043.8	10043.8	<0.000268	<0.000268

Table 4
Perimeter Air PCM and TEM Sampling Results
Pillsbury Mills Site

Sample ID	Air Monitoring Station Location	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Segment Volume (l)	Total Sample Volume (l)	PCM Results (f/cc)	Method Detection Limit (f/cc)
						Initial	Final	Average				
PM-S04-022317	Station 4	004	7:50	16:30	520	21.15	17.85	19.50	10138.7	10138.7	Occluded	NA
PM-S01-022717	Station 1	001	9:50	16:00	370	21.71	19.72	20.72	7666.0	7666.0	Occluded	NA
PM-S02-022717	Station 2	002	9:55	15:50	355	20.79	20.29	20.54	7291.3	7291.3	Occluded	NA
PM-S03-022717	Station 3	003	10:00	15:55	355	20.79	17.81	19.30	6850.4	6850.4	0.00143	0.000392
PM-S04-022717	Station 4	004	10:10	16:00	350	20.17	18.63	19.40	6790.3	6790.3	<0.000397	0.000397
PM-S01-030717	Station 1	001	8:40	15:15	395	12.69	11.75	12.22	4825.3	4825.3	0.000711	0.000558
PM-S02-030717	Station 2	002	8:45	15:20	395	12.68	12.60	12.64	4993.0	4993.0	0.00059	0.000539
PM-S03-030717	Station 3	003	8:50	15:25	395	12.22	10.75	11.49	4537.6	4537.6	<0.000592	0.000592
PM-S04-030717	Station 4	004	8:55	15:30	395	11.29	18.63	14.96	5908.0	5908.0	<0.000456	0.000456
PM-S01-030817	Station 1	001	8:45	15:40	415	12.62	12.40	12.51	5192.7	5192.7	0.00179	0.000519
PM-S02-030817	Station 2	002	8:50	15:45	415	12.10	11.88	11.99	4976.1	4976.1	<0.000540	0.000540
PM-S03-030817	Station 3	003	8:55	15:50	415	12.44	11.80	12.12	5029.6	5029.6	0.00078	0.000534
PM-S04-030817	Station 4	004	9:00	15:55	415	12.33	12.04	12.19	5058.4	5058.4	<0.000531	0.000531
PM-S01-032317	Station 1	001	7:20	11:40	260	14.95	13.89	14.42	3749.8	7830.5	<0.000343	0.000343
			11:40	16:25	285	13.89	14.74	14.32	4080.6			
PM-S02-032317	Station 2	002	7:25	11:45	260	14.96	14.16	14.56	3785.3	7551.7	<0.000357	0.000357
			11:45	16:10	265	14.16	14.26	14.21	3766.3			
PM-S03-032317	Station 3	003	7:30	11:50	260	15.27	11.43	13.35	3470.6	6874.5	<0.000391	0.000391
			11:50	16:15	265	11.43	14.26	12.85	3403.9			
PM-S04-032317	Station 4	004	7:55	11:55	240	17.11	16.38	16.74	4018.6	8307.3	<0.000323	0.000323
			11:55	16:20	265	16.38	15.99	16.18	4288.8			
PM-S01-032917	Station 1	001	7:30	11:25	235	15.14	12.03	13.58	3192.4	7682.3	0.000447	0.000350
			11:25	16:25	300	15.10	14.84	14.97	4490.0			
PM-S02-032917	Station 2	002	7:35	11:30	235	15.04	13.91	14.47	3400.9	7361.2	<0.000366	0.000366
			11:30	16:10	280	14.96	13.32	14.14	3960.3			
PM-S03-032917	Station 3	003	7:40	11:35	235	15.28	14.91	15.09	3546.6	7863.7	<0.000342	0.000342
			11:35	16:15	280	15.13	15.71	15.42	4317.0			
PM-S04-032917	Station 4	004	7:45	11:40	235	16.92	13.85	15.38	3614.9	7967.9	<0.000338	0.000338
			11:40	16:20	280	15.62	15.47	15.55	4353.0			
PM-S01-040417	Station 1	001	9:10	12:50	220	15.26	13.42	14.34	3153.8	6271.9	<0.000429	0.000429
			12:50	16:15	205	15.31	15.11	15.21	3118.1			
PM-S02-040417	Station 2	002	9:15	12:55	220	15.70	14.46	15.08	3318.4	6399.6	<0.000420	0.000420
			12:55	16:20	205	15.69	14.37	15.03	3081.3			
PM-S03-040417 *	Station 3 *	003	9:20	13:00	220	15.61	12.72	14.16	3115.9	6339.9	0.00178 *	0.000424
			13:00	16:25	205	15.72	15.73	15.73	3224.0			
PM-S04-040417	Station 4	004	9:25	13:05	220	15.61	14.03	14.82	3260.3	6305.6	<0.000427	0.000427
			13:05	16:30	205	15.07	14.64	14.86	3045.3			
PM-S01-040617	Station 1	001	7:35	11:35	240	15.22	13.71	14.46	3471.4	6951.1	<0.000387	0.000387
			11:40	15:30	230	15.17	15.09	15.13	3479.8			

Table 4
Perimeter Air PCM and TEM Sampling Results
Pillsbury Mills Site

Sample ID	Air Monitoring Station Location	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Segment Volume (l)	Total Sample Volume (l)	PCM Results (f/cc)	Method Detection Limit (f/cc)
						Initial	Final	Average				
PM-S02-040617	Station 2	002	7:40	11:45	245	15.65	12.87	14.26	3493.3	7113.7	<0.000379	0.000379
			11:45	15:45	240	15.62	14.55	15.09	3620.4			
PM-S03-040617	Station 3	003	7:45	11:50	245	15.58	11.45	13.51	3310.9	6015.7	<0.000448	0.000448
			11:50	14:50	180	15.47	14.58	15.03	2704.8			
PM-S04-040617	Station 4	004	7:50	11:55	245	15.49	12.62	14.06	3443.8	7027.6	<0.000382	0.000382
			11:55	15:50	235	15.36	15.14	15.25	3583.7			
PM-S01-041317	Station 1	001	7:45	11:35	230	15.40	14.47	14.94	3435.2	6792.5	Occluded	NA
			11:40	15:20	220	15.39	15.13	15.26	3357.3			
PM-S02-041317	Station 2	002	7:50	11:40	230	15.52	13.11	14.32	3292.4	6420.6	Occluded	NA
			11:45	15:30	225	15.53	12.28	13.90	3128.2			
PM-S03-041317	Station 3	003	7:55	11:45	230	15.62	14.63	15.12	3478.6	7038.3	0.00307	0.000382
			11:50	15:40	230	15.58	15.37	15.48	3559.7			
PM-S04-041317	Station 4	004	8:00	11:50	230	15.48	14.46	14.97	3443.8	7092.2	<0.000380	0.000380
			11:55	15:50	235	15.47	15.58	15.53	3648.4			
PM-S01-041917	Station 1	001	7:20	11:35	255	15.27	15.25	15.26	3890.8	7769.3	Occluded	NA
			11:40	16:10	270	15.25	13.48	14.37	3878.6			
PM-S02-041917	Station 2	002	7:35	11:40	245	15.14	15.20	15.17	3716.5	7561.2	0.0011	0.000356
			11:45	16:20	275	15.20	12.77	13.98	3844.6			
PM-S03-041917	Station 3	003	7:45	11:45	240	16.21	15.16	15.69	3765.4	7734.1	0.00184	0.000348
			11:50	16:30	280	15.16	13.18	14.17	3968.7			
PM-S04-041917	Station 4	004	7:55	11:50	235	16.75	14.31	15.53	3649.0	7989.5	0.000982	0.000337
			11:55	16:40	285	16.11	14.35	15.23	4340.5			
PM-S01-041917	Station 1	001	7:20	11:35	255	15.27	15.25	15.26	3890.8	7769.3	Occluded	NA
			11:40	16:10	270	15.25	13.48	14.37	3878.6			
PM-S02-041917	Station 2	002	7:35	11:40	245	15.14	15.20	15.17	3716.5	7561.2	0.0011	0.000356
			11:45	16:20	275	15.20	12.77	13.98	3844.6			
PM-S03-041917	Station 3	003	7:45	11:45	240	16.21	15.16	15.69	3765.4	7734.1	0.00184	0.000348
			11:50	16:30	280	15.16	13.18	14.17	3968.7			
PM-S04-041917	Station 4	004	7:55	11:50	235	16.75	14.31	15.53	3649.0	7989.5	0.000982	0.000337
			11:55	16:40	285	16.11	14.35	15.23	4340.5			
PM-S01-050217	Station 1	001	9:15	11:40	145	15.27	14.38	14.83	2149.8	6234.5	<0.000431	0.000431
			11:40	16:10	270	15.38	14.88	15.13	4084.7			
PM-S02-050217	Station 2	002	9:25	11:50	145	15.08	14.68	14.88	2157.5	6012.2	<0.000448	0.000448
			11:50	16:20	270	14.68	13.88	14.28	3854.7			
PM-S03-050217	Station 3	003	9:35	12:00	145	15.46	15.20	15.33	2222.9	6339.9	0.000619	0.000424
			12:00	16:30	270	15.20	15.29	15.25	4117.0			

Table 4
Perimeter Air PCM and TEM Sampling Results
Pillsbury Mills Site

Sample ID	Air Monitoring Station Location	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Segment Volume (l)	Total Sample Volume (l)	PCM Results (f/cc)	Method Detection Limit (f/cc)
						Initial	Final	Average				
PM-S04-050217	Station 4	004	9:45	12:10	145	15.46	15.12	15.29	2216.7	6250.6	<0.000430	0.000430
			12:10	16:40	270	15.12	14.76	14.94	4033.9			
PM-S01-051017	Station 1	001	7:25	11:25	240	15.14	15.00	15.07	3617.3	8216.1	Occluded	NA
			11:25	16:30	305	15.38	14.78	15.08	4598.8			
PM-S02-051017	Station 2	002	7:35	11:30	235	15.43	15.20	15.31	3598.9	7451.1	<0.000361	0.000361
			11:30	15:55	265	15.20	13.88	14.54	3852.2			
PM-S03-051017	Station 3	003	7:45	11:35	230	15.19	14.65	14.92	3431.5	7577.2	<0.000356	0.000356
			11:35	16:10	275	14.65	15.50	15.08	4145.8			
PM-S04-051017	Station 4	004	7:55	11:40	225	15.70	14.89	15.29	3441.0	7618.5	0.000709	0.000353
			11:40	16:20	280	14.89	14.95	14.92	4177.5			
PM-S01-051617	Station 1	001	9:25	11:25	120	15.21	15.01	15.11	1812.8	6248.2	Occluded	NA
			11:25	16:25	300	15.01	14.56	14.78	4435.4			
PM-S02-051617	Station 2	002	9:35	11:30	115	15.86	15.42	15.64	1798.1	6463.0	Occluded	NA
			11:30	16:35	305	15.42	15.17	15.29	4664.8			
PM-S03-051617	Station 3	003	9:45	11:35	110	16.17	15.55	15.86	1744.5	6565.0	0.00142	0.000410
			11:35	16:45	310	15.55	15.55	15.55	4820.5			
PM-S04-051617	Station 4	004	9:55	11:40	105	15.36	14.82	15.09	1584.7	6033.5	0.000976	0.000446
			11:40	16:55	315	14.82	13.42	14.12	4448.7			
PM-S01-052417	Station 1	001	7:15	11:15	240	14.80	14.62	14.71	3530.4	7522.2	0.000912	0.000358
			11:15	15:45	270	15.01	14.56	14.78	3991.8			
PM-S02-052417	Station 2	002	8:55	11:25	150	15.30	15.29	15.30	2294.7	6407.5	<0.000420	0.000420
			11:25	15:55	270	15.29	15.17	15.23	4112.8			
PM-S03-052417	Station 3	003	7:25	11:25	240	14.31	15.22	14.76	3542.9	7710.7	0.000700	0.000349
			11:35	16:15	280	14.22	15.55	14.89	4167.8			
PM-S04-052417	Station 4	004	7:35	11:45	250	15.21	14.09	14.65	3662.1	7514.1	<0.000358	0.000358
			11:45	16:25	280	14.09	13.42	13.76	3852.0			
PM-S01-053117	Station 1	001	7:15	11:25	250	15.57	15.50	15.53	3882.9	8293.7	0.000532	0.000324
			11:25	16:10	285	15.50	15.46	15.48	4410.8			
PM-S02-053117	Station 2	002	7:35	11:35	240	15.61	12.62	14.12	3388.1	6616.2	0.000741	0.000407
			11:35	15:35	240	15.56	11.34	13.45	3228.1			
PM-S03-053117	Station 3	003	7:45	11:45	240	15.34	14.65	14.99	3598.7	7102.6	0.001	0.000410
			11:45	15:45	240	14.65	14.55	14.60	3503.9			
PM-S04-053117	Station 4	004	7:55	11:55	240	15.33	13.34	14.33	3439.8	6837.4	0.000718	0.000393
			11:40	15:55	255	13.34	13.31	13.32	3397.6			

Table 4
Perimeter Air PCM and TEM Sampling Results
Pillsbury Mills Site

Sample ID	Air Monitoring Station Location	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Segment Volume (l)	Total Sample Volume (l)	PCM Results (f/cc)	Method Detection Limit (f/cc)
						Initial	Final	Average				
PM-S01-060617	Station 1	001	8:55	11:35	160	15.48	14.86	15.17	2427.3	6441.2	0.00061	0.000418
			11:35	15:55	260	15.50	15.37	15.44	4013.9			
PM-S02-060617	Station 2	002	9:05	11:25	140	15.45	11.65	13.55	1896.8	5996.2	<0.000449	0.000449
			11:25	15:55	270	15.38	14.99	15.18	4099.4			
PM-S03-060617	Station 3	003	9:10	11:45	155	15.16	14.74	14.95	2316.8	6322.9	0.000542	0.000426
			11:45	16:10	265	15.15	15.09	15.12	4006.1			
PM-S04-060617	Station 4	004	9:15	11:47	152	15.18	15.04	15.11	2296.7	6307.9	0.000171	0.000427
			11:47	16:15	268	15.04	14.89	14.97	4011.2			
PM-S01-072517	Station 1	001	9:35	11:35	120	15.40	15.37	15.39	1846.3	6186.3	0.00103	0.000434
			11:35	16:25	290	15.37	14.56	14.97	4340.0			
PM-S02-072517	Station 2	002	9:45	11:40	115	15.50	14.51	15.00	1725.3	5403.0	0.000636	0.000498
			11:40	16:05	265	14.51	13.25	13.88	3677.7			
PM-S03-072517	Station 3	003	9:50	11:45	115	15.70	13.96	14.83	1705.0	5329.3	0.00092	0.000504
			11:45	16:15	270	13.96	12.89	13.42	3624.3			
PM-S04-072517	Station 4	004	9:55	11:55	120	15.72	14.96	15.34	1841.0	5602.1	0.000876	0.000480
			11:55	16:20	265	14.96	13.42	14.19	3761.0			
PM-S02-080817	Station 2	001	9:35	11:35	120	15.53	12.25	13.89	1666.4	5913.9	0.00058	< 0.000454
			11:35	16:25	290	15.62	13.67	14.65	4247.5			
PM-S06-080817	Station 6	003	9:50	11:45	115	15.93	15.46	15.69	1804.6	5922.8	0.000993	< 0.000454
			11:45	16:15	270	15.46	15.05	15.25	4118.2			
PM-S07-080817	Station 7	004	9:55	11:55	120	15.82	15.60	15.71	1885.1	5692.1	<0.000472	< 0.000472
			11:55	16:20	265	15.60	13.13	14.37	3807.0			
PM-S03-040417 *	Station 3 *	003	9:20	13:00	220	15.61	12.72	14.16	3115.9	6339.9	<0.000424	0.000424
			13:00	16:25	205	15.72	15.73	15.73	3224.0			

Notes:

* Refer to Corresponding PCM Result of Sample Collected on April 4, 2017 from Station 3

<: Less than

f/cc: Fibers per cubic centimeter

l: Liters

lpm: Liters per minute

Min: Minutes

NA Not Applicable

PCM: Phase contrast microscopy

TEM: Transmission electron microscopy

Value above the 0.001 f/cc action level

Table 5
Universal Waste Disposal Inventory
Pillsbury Mills Site

Manifest Number	Quantity	Waste Type	Labeled/Contents	Disposition Facility
001259819VES	2383	Mercury Containing	5-Foot and above Fluorescent Light Bulbs	TBD
001259819VES	3159	Mercury Containing	4-Foot and under Fluorescent Light Bulbs	TBD
001259820VES	10	Mercury Containing	U-Tube/Compact/Circular Lamp Bulbs	TBD
001259821VES	4,740 (pounds)	Polychlorinated bi-phenyls	PCB Light Ballast	TBD
	141 (pounds)	Lead Batteries	Automotive Lead Acid and Sealed Lead Acid	TBD

Table 6
Lab Pack and Other Hazardous Waste Materials Inventory
Pillsbury Mills Site

	Number of Containers	Estimate Volume Weight	Chemical Name / Description
1	1	1 pound	Sodium Diethyldithio-Carbamate
2	1	1 pound	Thiourea
3	1	2 pounds	Potassium Phosphate Dibasic
4	1	¼ pound	Cobalt Chloride
5	1	125 grams	Tetra-acetic Acid
6	1	1 pound	Zinc Metal
7	1	¼ pound	Cobaltous Chloride
8	1	10 grams	Potassium Platinum II Tetrachloride
9	1	20 grams	Cobalt Chloride
10	1	100 grams	Dodecyl Sodium Sulfate
11	1	1 pound	Silver Nitrate
12	1	1 vial	8 glass tubes with Cyanide various concentrations of: 0.0, 0.01, 0.02, 0.03, 0.04, 0.06, 0.08, 0.1
13	1	1 pound	Potassium Thiocyanate
14	3	½ quart	Film Solution, n.o.s.
15	1	40 grams	Hydroxynaphthol Blue
16	1	5 pounds	Calcium Sulfate
17	1	1 gallon	Naphtha
18	1	1 gallon	Automotive Surface Cleaner, Solvent
19	1	1 gallon	Kure-n-seal liquid
20	2	500 grams	Citric Acid Monohydroxide
21	1	500 grams	Potassium Hydroxide
22	1	1 kilogram	Ammonium Nitrate
23	1	500 grams	Sodium Phosphate
24	2	500 grams	Potassium Thiocyanate
25	1	1 gallon	Muratic Acid
26	1	1 pint	Muratic Acid
27	1	1 gallon	Sulfuric Acid
28	1	1 gallon	Nitric Acid
29	1	40 grams	Starch Acid
30	1	5 gallon	Ink Jet Coding Ink Solvent
31	1	5 pounds	Bareground Vegetation Control (Imazapyr-Diuron)
32	1	5 gallon	Weedkiller (Bromacil)
33	1	7 gallon	Calci-Gone (HCL Acid)
34	2	1 gallon	Dimethyl Phthalate
35	1	10 pounds	Polymeric Isocyanate (compressed gas)
36	1	10 pounds	Polyamine Fluorocarbon
37	59	10 ounces	Spray paint cans
38	14	Various sizes	Unknown lab grade reagent type chemicals (labs destroyed)

Table 7
Lab Pack Disposal Summary
Pillsbury Mills Site

Manifest Number	Number of Containers	Waste Container Type/Volume	Labeled/Contents	Disposition Facility
001259819VES	8	Compressed Gas Cylinders (Various Sizes)	Acetylene, anhydrous ammonia, carbon dioxide, nitrogen and helium	Veolia Environmental Services 7 Mobile Avenue Sauget, Illinois 62201
001259819VES	8	Lab Pack Boxes (Various Contents)	Ignitable, Reactive, Corrosive (Liquids and Solids)	Veolia Environmental Services 7 Mobile Avenue Sauget, Illinois 62201
001259820VES	7	Six 275-gal totes One 55-gallon drum	Used Oils, Waste-Antifreeze	Veolia Environmental Services West 124 Boundary Road Menomonee Falls, Wisconsin 53051
001259821VES	6	One 275-gallon tote One 5-gallon pail Four Lab Pack Boxes	Used Oils, Mercury Containing, Acids, Aerosol Cans	Veolia Environmental Services West 124 Boundary Road Menomonee Falls, Wisconsin 53051

Table 8
Data Analysis Summary of DustTrak Results
15-Minute Time Weighted Average
Pillsbury Mills Site

Date	Unfiltered Particulate Data			Filtered Particulate Data		
	Max 15-min TWA (mg/m3)	Start Time	End Time	Max 15-min TWA (mg/m3)	Start Time	End Time
2/8/2017	0.005310078	4:20:33 PM	4:35:34 PM	0.005310078	4:20:33 PM	4:35:34 PM
2/9/2017	0.015042082	9:32:14 AM	9:47:15 AM	0.007981174	9:20:05 AM	9:35:06 AM
2/10/2017	0.009620155	11:57:42 AM	12:12:43 PM	0.009620155	11:57:42 AM	12:12:43 PM
2/13/2017	0.030198675	4:48:48 PM	5:03:50 PM	0.030198675	4:48:48 PM	5:03:50 PM
2/14/2017	0.396747781	12:37:38 PM	12:52:38 PM	0.021228635	1:51:50 PM	2:06:51 PM
2/15/2017	0.012299779	3:23:04 PM	3:38:05 PM	0.012299779	3:23:04 PM	3:38:05 PM
2/16/2017	0.208625976	9:40:47 AM	9:55:48 AM	0.073536117	9:41:27 AM	9:56:27 AM
2/17/2017	507.7839577	11:58:09 AM	12:13:09 PM	0.013733843	9:57:16 AM	10:12:16 AM
2/21/2017	0.038011074	4:37:44 PM	4:52:45 PM	0.038011074	4:37:44 PM	4:52:45 PM
2/22/2017	3009.946148	1:26:48 PM	1:41:49 PM	0.052153163	1:58:54 PM	2:13:54 PM
2/23/2017	0.125423355	10:03:22 AM	10:18:22 AM	0.03801111	4:13:54 PM	4:28:54 PM
2/24/2017	4.887215719	11:48:33 AM	12:03:33 PM	0.026913334	10:19:22 AM	10:34:22 AM
2/27/2017	0.070962226	2:49:46 PM	3:04:46 PM	0.011986712	3:40:31 PM	3:55:33 PM
2/28/2017	0.24975333	2:27:16 PM	2:42:16 PM	0.052223641	11:59:18 AM	12:14:19 PM
3/1/2017	0.088293322	2:28:42 PM	2:43:42 PM	0.02891796	8:22:48 AM	8:37:49 AM
3/2/2017	0.356941117	1:16:27 PM	1:31:27 PM	0.015619313	2:08:51 PM	2:23:51 PM
3/6/2017	22.64844673	11:40:02 AM	11:55:02 AM	0.016170732	12:59:38 PM	1:14:39 PM
3/7/2017	0.010604213	12:13:28 PM	12:28:29 PM	0.007659445	12:13:02 PM	12:28:02 PM
3/8/2017	0.009757777	3:28:08 PM	3:43:08 PM	0.016008879	3:23:42 PM	3:38:42 PM
3/9/2017	0.016079911	3:34:51 PM	3:49:51 PM	0.016079911	3:34:51 PM	3:49:51 PM
3/22/2017	0.072596668	8:18:50 AM	8:33:50 AM	0.018141907	3:34:42 PM	3:49:44 PM
3/23/2017	0.020252492	9:15:27 AM	9:30:28 AM	0.020252492	9:15:27 AM	9:30:28 AM
3/27/2017	0.246722205	12:06:56 PM	12:21:56 PM	0.03854606	11:30:48 AM	11:45:48 AM
3/28/2017	0.202042209	2:47:40 PM	3:02:40 PM	0.039017778	10:32:38 AM	10:47:38 AM
3/29/2017	0.071225914	8:55:16 AM	9:10:17 AM	0.071225914	8:55:16 AM	9:10:17 AM
3/30/2017	0.030559379	11:03:53 AM	11:18:54 AM	0.030559379	11:03:53 AM	11:18:54 AM
4/4/2017	0.004358491	2:23:07 PM	2:38:08 PM	0.004358491	2:23:07 PM	2:38:08 PM
4/5/2017	0.022827777	9:08:41 AM	9:23:41 AM	0.020145556	1:19:03 PM	1:34:03 PM
4/6/2017	0.009290788	11:44:25 AM	11:59:26 AM	0.009290788	11:44:25 AM	11:59:26 AM
4/11/2017	0.031384451	12:49:39 PM	1:04:39 PM	0.006838137	11:16:29 AM	11:31:30 AM
4/12/2017	0.028241112	1:29:16 PM	1:44:16 PM	0.011655211	3:43:19 PM	3:58:21 PM
4/13/2017	0.100788891	2:22:34 PM	2:37:34 PM	0.02101663	2:22:41 PM	2:37:42 PM
4/18/2017	0.009196666	10:56:31 AM	11:11:31 AM	0.008980066	12:37:13 PM	12:52:15 PM
4/19/2017	0.022670001	12:45:29 PM	1:00:29 PM	0.015077691	11:35:23 AM	11:50:23 AM
4/20/2017	0.774548897	9:53:33 AM	10:08:33 AM	0.017675916	3:11:14 PM	3:26:14 PM
4/24/2017	0.008992273	1:03:58 PM	1:19:01 PM	0.009030353	1:03:58 PM	1:19:01 PM
4/26/2017	0.010231111	8:36:30 AM	8:51:30 AM	0.010231111	8:36:30 AM	8:51:30 AM
5/2/2017	0.150644446	1:51:22 PM	2:06:22 PM	0.005747222	11:26:09 AM	11:41:09 AM
5/3/2017	0.00632816	11:20:44 AM	11:35:45 AM	0.008100333	11:15:33 AM	11:30:34 AM
5/4/2017	2.834493308	10:40:42 AM	10:55:42 AM	0.011160932	8:29:21 AM	8:44:22 AM
5/10/2017	0.199082206	1:24:58 PM	1:39:58 PM	0.03708879	8:46:03 AM	9:01:03 AM
5/11/2017	0.048563053	4:04:17 PM	4:19:20 PM	0.048563053	4:04:17 PM	4:19:20 PM
5/16/2017	0.021204218	11:47:25 AM	12:02:26 PM	0.021204218	11:47:25 AM	12:02:26 PM
5/17/2017	0.141567775	9:13:37 AM	9:28:37 AM	0.028908889	9:19:42 AM	9:34:42 AM
5/18/2017	0.016644444	8:04:19 AM	8:19:19 AM	0.016644444	8:04:19 AM	8:19:19 AM
5/24/2017	0.735878881	9:29:26 AM	9:44:26 AM	0.018432778	11:06:07 AM	11:21:07 AM
5/25/2017	0.06325	11:08:00 AM	11:23:00 AM	0.050908333	11:07:19 AM	11:22:19 AM
5/30/2017	0.003782464	3:38:01 PM	3:53:02 PM	0.003782464	3:38:01 PM	3:53:02 PM
5/31/2017	0.057859045	2:55:27 PM	3:10:28 PM	0.079009413	2:55:10 PM	3:10:12 PM

Table 8
Data Analysis Summary of DustTrak Results
15-Minute Time Weighted Average
Pillsbury Mills Site

Date	Unfiltered Particulate Data			Filtered Particulate Data		
	Max 15-min TWA (mg/m3)	Start Time	End Time	Max 15-min TWA (mg/m3)	Start Time	End Time
6/1/2017	0.01389789	2:31:06 PM	2:46:07 PM	0.008594684	7:23:23 AM	7:38:24 AM
6/7/2017	0.007813187	2:16:15 PM	2:31:19 PM	0.007813187	2:16:15 PM	2:31:19 PM
6/8/2017	0.007087778	2:12:15 PM	2:27:15 PM	0.007910556	2:12:15 PM	2:27:15 PM
6/15/2017	0.009261641	2:31:20 PM	2:46:21 PM	0.006941667	2:24:40 PM	2:39:40 PM
6/20/2017	0.011133334	12:48:50 PM	1:03:50 PM	0.005618334	12:48:50 PM	1:03:50 PM
6/21/2017	0.491370005	7:38:38 AM	7:53:38 AM	0.034260267	7:21:08 AM	7:36:09 AM
6/22/2017	0.076508884	11:38:04 AM	11:53:04 AM	0.0173	7:57:03 AM	8:12:03 AM
6/28/2017	0.018504444	12:30:47 PM	12:45:47 PM	0.018504444	12:30:47 PM	12:45:47 PM
7/11/2017	0.028245283	1:36:22 PM	1:51:23 PM	0.026970033	1:36:22 PM	1:51:23 PM
7/12/2017	0.025620843	7:26:02 AM	7:41:04 AM	0.025620843	7:26:02 AM	7:41:04 AM
7/13/2017	0.013432372	1:01:40 PM	1:16:41 PM	0.013432372	1:01:40 PM	1:16:41 PM
7/17/2017	0.039122229	4:21:44 PM	4:36:44 PM	0.012320399	12:32:03 PM	12:47:04 PM
7/18/2017	0.025974473	7:20:45 AM	7:35:45 AM	0.025974473	7:20:45 AM	7:35:45 AM
7/25/2017	0.014803552	12:51:10 PM	1:06:10 PM	0.014803552	12:51:10 PM	1:06:10 PM
7/26/2017	0.053138895	9:06:26 AM	9:21:26 AM	0.041932224	11:26:22 AM	11:41:22 AM
7/27/2017	0.012641907	3:01:22 PM	3:16:23 PM	0.012641907	3:01:22 PM	3:16:23 PM
8/1/2017	0.054834433	1:43:02 PM	1:58:02 PM	0.025993341	3:08:47 PM	3:23:48 PM
8/2/2017	0.231676681	7:26:48 AM	7:41:48 AM	0.045206111	7:26:48 AM	7:41:48 AM
8/3/2017	0.029978913	10:03:05 AM	10:18:06 AM	0.029978913	10:03:05 AM	10:18:06 AM
8/8/2017	0.028132221	1:58:11 PM	2:13:11 PM	0.012556541	2:45:36 PM	3:00:37 PM
8/9/2017	0.017964523	8:01:45 AM	8:16:46 AM	0.017964523	8:01:45 AM	8:16:46 AM
8/10/2017	0.120417779	2:44:42 PM	2:59:42 PM	0.032606666	10:25:38 AM	10:40:38 AM
8/15/2017	0.012335557	10:44:47 AM	10:59:47 AM	0.010807991	2:58:11 PM	3:13:12 PM
8/16/2017	0.047872215	10:41:25 AM	10:56:25 AM	0.017797118	8:22:17 AM	8:37:18 AM
8/22/2017	0.012327778	11:45:01 AM	12:00:01 PM	0.014081576	11:45:06 AM	12:00:06 PM
8/23/2017	0.032872228	11:17:03 AM	11:32:03 AM	0.016029444	1:51:06 PM	2:06:06 PM
8/30/2017	0.027911406	9:55:32 AM	10:10:33 AM	0.027911406	9:55:32 AM	10:10:33 AM
8/31/2017	0.032219512	7:57:53 AM	8:12:54 AM	0.032219512	7:57:53 AM	8:12:54 AM
9/5/2017	0.080314453	3:14:14 PM	3:29:14 PM	0.018256098	3:14:08 PM	3:29:09 PM
9/6/2017	0.010941242	7:15:53 AM	7:30:55 AM	0.018952778	3:50:33 PM	4:05:33 PM
9/7/2017	0.02583	3:23:55 PM	3:38:55 PM	0.02599	3:23:55 PM	3:38:55 PM

Key Anomalous Instrument Data > 2.5 mg./m3 for 15 minutes

Table 9
Unknown Chemical Containers Haz-Cat Identified
Pillsbury Mills Site

Sample Number	Quantity (Gallon)	Container Type	Flammable (Y/N)	Explosive (Y/N)	pH	Water Soluble	Reactive (Y/N)	Cyanide (pH>7)	Oxidizer (Y/N)	Chlor-N-Oil PCB	Description
1	55	S	N	N	5	N	N	N	N	Non-PCB	Yellow, amber mineral oil
2	Tote	P	N	N	6	N	N	N	N	Non-PCB	Dark black oil
3	Tote	P	N	N	5	N	N	N	N	Non-PCB	Clear water w minor floating yellow oil
4	Tote	P	N	N	6	Y	N	N	N	Non-PCB	Floating oil with water
5	Tote	P	N	N	7	N	N	N	N	Non-PCB	Dark oil (used)
6	Tote	P	N	N	6	N	N	N	N	Non-PCB	Clear oil
7	Tote	P	N	N	6	N	N	N	N	Non-PCB	Clear oil
8	55	S	N	N	6	N	N	N	N	Non-PCB	Light amber oil w minor dark oil (coates)
9	55	S	N	N	6	N	N	N	N	-	Yellow oil (corn oil)
10	55	S	N	N	8	N	N	N	N	Non-PCB	Dark Black (used oil)
11	80	S	N	N	6	N	N	N	N	Non-PCB	Slightly dark oil
12	70	S	N	N	5	N	N	N	N	Non-PCB	Amber colored oil
13	70	S	N	N	6	N	N	N	N	Non-PCB	Dark Black (used oil)
14	45	S	N	N	5	N	N	N	N	Non-PCB	Dark Black (used oil) Labeled as diesel
15	55	P	N	N	5	N	N	N	N	-	Yellow oil
16	55	P	N	N	6	N	N	N	N	Non-PCB	Dark Black (used oil)
17	55	P	N	N	6	N	N	N	N	Non-PCB	Amber colored oil
18	5	S	N	N	5	N	N	N	N	-	Anti-freeze
19	10	P	N	N	6	N	N	N	N	Non-PCB	Amber colored oil
20	55	P	Y	N	7	N	N	N	N	Non-PCB	Outboard engine fuel 2-stroke mix labeled
21	55	S	N	N	6	N	N	N	N	Non-PCB	Amber colored oil
22	5	S	N	N	7	N	N	N	N	Non-PCB	Dark oil (used)
23	5	S	N	N	8	N	N	N	N	Non-PCB	Dark oil (used) odorous

Key - Not tested for PCBs with Chlor-N-Oil test kit

APPENDIX C

START FIELD NOTES

Pittsburg Mills Leptos Removal



Rite in the Rain®
ALL-WEATHER
ENVIRONMENTAL
FIELD BOOK
No 550

ME-017

103X 90260015051701003 + 2017



ENTERING INFORMATION IN THE LOGBOOK

Enter the following information at the beginning of each day or whenever warranted during the course of a day:

- Date
- Starting time
- Specific location
- General weather conditions and approximate temperature
- Names of personnel present at the site. Note the affiliation(s) and designation(s) of all personnel
- Equipment calibration and equipment models used.
- Changes in instructions or activities at the site
- Levels of personal protective clothing and equipment
- A general title of the first task undertaken (for example, well installation at MW-11, decon at borehole BH-11, groundwater sampling at MW-11)
- Approximate scale for all diagrams. If this can't be done, write "not to scale" on the diagram.
- Indicate the north direction on all maps and cross-sections. Label features on each diagram.
- Corrections, if necessary, necessarily including a single line through the entry being corrected. Initial and date any corrections made in the logbook.
- After last entry on each page, initials of the person recording notes. No information is to be entered in the area following these initials.
- At the end of the day, signature of the person recording notes and date at the bottom of the last page. Indicate the end of the work day by writing "Left site at (time)." A diagonal line must be drawn across any remaining blank space at the bottom of this last page.

The following information should be recorded in the logbook after taking a photograph

- Time, date, location, direction, and, if appropriate, weather conditions
- Description of the subject photographed and the reason for taking the picture
- Sequential number of the photograph and the film roll number or disposable camera used (if applicable)
- Name of the photographer

The following information should be entered into the logbook when collecting samples:

- Location description
- Name(s) of sampler(s)
- Collection time
- Designation of sample as a grab or composite sample
- Type of sample (water, sediment, soil gas, etc.)
- On-site measurement data (pH, temperature, specific conductivity)
- Field observations (odors, colors, weather, etc.)
- Preliminary sample description
- Type of preservative used
- Instrument readings.

X2057

NON-RESPONSIVE

START FIELD LOGBOOK

Logbook Tracking Number

ME 017

Site Name Pillsbury Mills Asbestos Removal

Issue to

T Binz TT

Springfield

Date Issued

1/10/17

62702

TDD #

103X902600015051701063

Dec 11 B1245 dnf

Setup

Zero Cal Jc

Rite in the Rain
ALL-WEATHER WRITING PAPER

ALL-WEATHER ENVIRONMENTAL FIELD BOOK

Numbered Pages

Name TOM BINZ

Address _____

Phone 314-550-4208

Project Pillsbury Mills Asbestos Removal

 B_{1-2} 

TETRA TECH

Rite in
paper the
pencil of
of the fie

Tom Binz
Environmental Scientist

Specifications

938 South Highway Drive, Fenton, MO 63076
Cell +1 314 550 4208 Tel +1 816 412 1962
tom.binz@tetrattech.com tetrattech.com

RiteInTheRain.com

Made in the USA
US Pat No. 6,803,040

CONTENTS

[illegible]

Reference Page Index

Error codes, Hazardous classifications, Container types
 Sampling guidelines (Liquids)
 Sampling guidelines (Solids)
 Approximate Volume of Water in Casing or Hole, Ground Water Monitoring Well
 PVC Pipe casing tables
 Soil Classification
 Soil Classification
 Maximum Concentration of Contaminants for the Toxicity Characteristic
 Conversions (Concentrations, Volume/Flow or Time, Velocity, Acceleration)
 Conversions (Length, Weight, Volume, Temp, etc...)

CONTENTS

PAGE	REFERENCE	DATE
George Krebs	NON-RESPONSIVE	
Charles Mikalain		
OSP Shawn		

Location

Date

2/6/17

Project / Client Mobilization Day

Spring Field weather: overcast 48°F N winds

0832 Depart ~~St~~ST St. Louis to
plug osc items stored at Chemotex.

1347 Arrive at site.

OSC Tasking Deploy PDRs
at Gate Entrance & South Force Line

PDR UPWIND #1

PDR Downwind II 2

1410 OSC want START to address
SOSC Krebs comment on ECP

1710 OSC Dyports Site

Run + Start stay to meet w/
Private Security Firm & allow
PDRs longer Run Time.

1752 PDR #1 (conc: 0.077 mg/l)

$T_{WA}: 0,13 \text{ g/l in}^3$

PDR#2 Conc: 0.059 mg/l³

TWA: 0.193 mg/m³

1757 Depart Site

ECP comments will delay
until Tuesday 2/17/17

~~The Day~~
2/6/17

2/7/17

Project / Client 58°F 7-10mph SSE 50% CO₂
Humid 92%

0755 Arrive on-site & SAFETY BRIEF:

- SLIP, TRIPS & FALLS
- Hot Zone Level "C"
- Approach to Place barricades
- WET Areas

OSC Directs SOSC, Krebs & ERS Foreman, Bret Glaspy to Recon buildings for Asbestos Removal approach, safety, and ~~then~~ familiarize w/ FEPA building Nomenclature & Location. Also, OSC Directs RM to hook-up to fire hydrant for cleaning of Concrete Surfaces for site ingress/egress and ducto Field Trailers arriving today.

0842 OSC will not be on-site at all The week of 2/20/17 due to travel, Christina Benekie will be on-site on 2/21 - 2/24/17.

0935 Winds are shifting now: WESTERLY. 17 mph.

1002 Tt Justin Bolton - Hutchins Arrives

1012 SOSC George Krebs Sustains a hand puncture wound from razor wire near Site Entrance

2/7/17

1210 Depart Site for brief Lunch

1242 Drive to Purchase:

- Job boxes for AIRCON'S
- Locks and cabbies to secure all instruments while deployed?

1450 Return to site.

START Binz & Buttons Set about to develop Air Monitoring Stations; Location set up as per the OSC, who wants all but one instrument out side of the site for can

1607 Air Monitoring stations positions are nearly done

1705 Depart Site.

Forgot PDR's

#1 upwind TWA = 0.162

#2 down TWA = 0.177

~~John 220~~
2/7/17

6

Location

WEDNESDAY

Date

2/8/17

Project / Client

28°F Co. snow WNW 8mph

0700 TALE GATE SAFETY Brief
 • SPD & Fire Dept here.
 • Trailers to be here today

0740 SETUP station 2

0800 STATION #2

Avg = 23.415 L/min

0820 STATION #3

Avg = 21.155 L/min

0847 STATION #4

Avg = 22.473 L/min

0916 STATION #1 CP

Avg = 21.504 L/min

1202 STATION #4 Battery
died and was replaced

1225 Depart site for Lunch

1250 Return to Site

1417 Paul Reusch and Robert

Condroad Arrive w/agency
ATV and Viper antenna's.1533 OSC Reusch & Robert Condroad
depart site.1541 Viper Setup will Take additional
time to debug.

7

Location

Date

2/8/17

Project / Client

1450 Station 1

Ave: 22.506

1455 station #2

Ave: 22.607

1502 station #3

Ave: 21.699

1507 station #4

Ave: 20.503

1528 Depart site

• Need protective system
for AIR Cans

• Need a memory stick

PARS #1

Paul Reusch
 2/8/17

8

Location 13°F Clear

Date

2/9/17Project / Client WIND West 8mph

0650 Arrive on site

0700 Safety Brief

0722 Briefing over

Initiate Air Monitor system

0755 Station #4

Avg: 34,458 L/m^3

0809

Station #3

Avg: 25,532 L/m^3

0818

Station #2

Avg: 23,451 L/m^3 ~~STATION #2~~

0835

Station #1

Avg: 22,480 L/m^3

1050

Winds Northwest 9mph.

High gain Antennas do not

appear to work at

Stations #3 & #4 at This

Time

1230 Lunch break

1326 Return to site

20°F Wind WSW 6mph

PDR #1 Down TWA = 0.002

#2 Upwind TWA = 0.003

9

Location

Date

2/9/17

Project / Client

1602 STATION #4 Avg 10,861 L/m^3
 1606 STATION #3 Avg 23,488 L/m^3
 1606 STATION #2 Avg 19,875 L/m^3
 1625 STATION #1 Avg 17,721 L/m^3
 1717 Depart Site

Fluor
 2/9/17

2/10/17

0700 SAFETY Brief

- Moving debris Piles while wet Today
- Rock coming in

0750 STATION #1

Avg: 25,106 L/m^3

0810 STATION #4

Avg: 29,675 L/m^3

0820 STATION #3

Avg: 26,361 L/m^3

0841 STATION #2

Avg: 20,401 L/m^3

1420 STATION #1

Avg: 23,451 L/m^3

1430 STATION #2

Avg: 20,107 L/m^3

1441 STATION #4

Avg: 27,169 L/m^3

1455 STATION #3

Avg: 19,355 L/m^3

1534 Depart site

[Signature]
2/10/17

Monday

2/13/17

Sunny Clear

0855 Arrive on-site

0920 STATION 1

Avg = 19,061 L/m^3

0930 STATION 2

Avg = 21,850 L/m^3

0940 STATION 3

Avg = 21,512 L/m^3

0950 STATION 4

Avg = 21,905 L/m^3

EMC sets about to get the shaver

Trailer operational, Setting up

Scrubber for Truck loading ops

1122 STATION #1 Avg = 18,183 L/m^3 1657 STATION #2 Avg = 18,994 L/m^3 1641 STATION #3 Avg = 19,147 L/m^3 1720 STATION #4 Avg = 17,767 L/m^3

Charging all instrument.

[Signature]
2/13/17

Location Tuesday Date 2/14/17
 Project / Client 35°F WSW 8 mph

0700 - Safety Briefing

- Situational awareness
- Continue to move debris.

- Loading dock

- Backery Mix Bldg.

- Remove all containers including empty

Note: No debris loading today

0730 Air Conz Cal up

Station #4 Aug = 21,335 ellm^3

0745 " " #1 Aug = 21,647 ellm^3

0802 " " #3 Aug = 24,268 ellm^3

0829 " " #2 Aug = 21,257 ellm^3

0955 Newspaper Media arrives

1407 Station #3 Aug = 22,590 ellm^3

1415 " #4 Aug = 20,876 ellm^3

1420 " #1 Aug = 21,012 ellm^3

" #2 Aug = 19,466 ellm^3

1637 Depart Site

Joe [Signature]
2/14/17

Location WEDNESDAY Date 2/15/17
 Project / Client Clear, Cold 30°F WSW 6 mph
1st Day of PACM Debris Loadout

0700 SAFETY Briefing

- First Day of Loading ACM Debris on North SIDE of Site

0745 CAL UP TO High volumes:

0747 STATION #1 Aug = 22,339 ellm^3

0749 STATION #2 Aug = 20,922 ellm^3

0755 STATION #3 Aug = 22,510 ellm^3

0759 STATION #4 Aug = 22,678 ellm^3

0952 First Truckload for Loadout of ACM Debris

1531 STATION #1 = Aug = 21,221 ellm^3

1540 Station #2 = 19,191 ellm^3

1550 STATION #3 = Aug = 17,5472 ellm^3

1600 STATION #4 = Aug = 19,9266 ellm^3

1647 RM Lybarger indicates a total of 5 truckloads of debris

this day

1722 Depart site

Joe [Signature]
2/15/17

14

Location Thursday

Date

2/16/17

Project / Client

Clear, cold 26°F SSE 4 mph
2nd Day of PACM Loadout

0635 Arrive on-site

0700 Safety Brief

- Buddy System
- Radios

0740 STATION #1 Avg = 22,575 L/m^3 0745 STATION #2 Avg = 21,089 L/m^3 0750 STATION #3 Avg = 17,522 L/m^3 0755 STATION #4 Avg = 20,301 L/m^3 0947 OSC request start Dir2
to respond to Sue Pastor
Community Relations Dept
request for information
Sent Sue Pastor project update

1510 Air Con 2 sample end of day

1540 STATION #1 Avg = 20,269

1545 " #2 Avg = 19,513

1550 " #3 Avg = 14,496

1600 " #4 Avg = 18,461

1722 Depart Site

Jim [Signature]
2/16/17

15

Location Friday

Date

2/17/17

Project / Client

Clear 46°F SSW 7 mph
3rd day of PACM Loadout

0646 Arrive on-site

0700 Safety Briefing

- OSC Turner indicates that because today is a shorter workday, no AIRCON2 samples collected today.

0842 OSC Turner wants TDD
Amendment #1 submitted
This day 2:35 PM.

1140 Drive to Lanes to

acquire wire straps w/ self-tape
screws for Viper Antenna wire1205 OSC Turner executes
TDD amendment #1.

1404 Depart site

Jim [Signature]
2/17/17

Tuesday

2-21-17

57°F Light rain.
 OSC Kristina Behnke stops in today all week

- 0635 Depart St. Louis, Mo
 0850 Arrive at site
 0940 Cal-up Aircons
 0945 STATION #1 Avg = 21.789
 0950 #2 Avg = 21.127
 0955 #3 Avg = 22.748
 1000 #4 Avg = 22.124
 1120 Rain stops / radar is clear
 Put out Repeaters
 1210 Andrew Ruthertford FOX 59
 ABC 20 taking video from
 across the street.
 1419 RM Lybarger indicates that
 City of Springfield indicates
 The "site" is pumping
 water from building basements
 to city sewer → NOT
 1610 STATION #1 Avg = 20.186 l/m^3
 1625 STATION #2 Avg = 19.789 l/m^3
 1620 STATION #3 Avg = 18.871 l/m^3
 1615 STATION #4 Avg = 21.267 l/m^3
 1710 Depart site

[Signature]
 2/21/17

WEDNESDAY

2/22/17

46°F SSW 3mph Fog 11

- 0641 Arrive on-site
 0700 Safety Briefing.
 • Media presence; yesterday
 ABC/FOX Local affiliate on-site
 0725 CALUP For Aircons
 0727 STATION #1 Avg = 21.568 l/m^3
 0730 STATION #2 Avg = 20.782 l/m^3
 0735 STATION #3 Avg = 21.851 l/m^3
 0740 STATION #4 Avg = 19.438 l/m^3
 1010 VIPER STATION #4 is
 hanging up a high value at
 the computer but DustTrack
 is performing admirably
 1240 Depart site to acquire
 weather-proof boxes for VIPER
 repeaters.
 1602 STATION #2 Avg = 19.713 l/m^3
 1610 #3 Avg = 17.721 l/m^3
 1615 #4 Avg = 20.104 l/m^3
 1620 #1 Avg = 19.526 l/m^3

[Signature]
 2/22/17

Thursday

2-23-17

Foggy 47°F 20% UOR: ESE 3mph

0700 SAFETY Briefing
• Severe weather actions.

- use rally point
- use radio comms

0722 Initiate AIRCON2 Cal up This day

0725 STATION #1 Avg = 21.681 l/min

0730 STATION #2 Avg = 21.413 l/min

0740 STATION #3 Avg = 20.319 l/min

0750 STATION #4 Avg = 21.146 l/min

1010 WORKING on SITREP #1 Draft today.

1022 Review of Viper Data from 2-22-17 NOTE: STATION #3 had high value and hung up from Metal debris pile Blocking signal?

1550 Final Cal This day

1600 STATION #1 Avg. = 19.875 l/min

1605 STATION #2 Avg. = 18.507 l/min

1615 STATION #3 Avg. = 18.686 l/min

1625 STATION #4 Avg. = 17.849 l/min

1707 Depart Site

SLB 2-23-17

Friday

2-24-17

Clear, Breezy South 18mph

0635 Arrive on-site.

0700 Safety Briefing

- High winds today, so go easy with lining trucks.
- WEAR HAND HATS w/ chin straps (on-order)
- Early demob today -

0735 OSC does not require asbestos air sampling This day due to early. will set up Dust Tracks

0952 R.M. Lybarger very supportive today of high winds with dusts + extra water.

1122 Site perimeter inspection passes inspection this day

1344 Initiate Dust Track disassemble.

1438 Depart Site

SLB
2-24-17

Location Monday

Date

2-27-17Project / Client RC 42°F SW Graph

- 0900 SAFETY Briefing
- No loadout of PACM Debris today
 - Recon Bakery Mix Tower Today

0940 CAL up AIR con's

0950 STATION #1 = 21,714 l/m

0955 " #2 = 21,692 l/m

1000 " #3 = 20,788 l/m

1010 " #4 = 20,174 l/m

1030 • Continue work on SITREP

1210 Driveby inspection of Site perimeter Fence.

1215 There is a new ZIP into the Southern fence next to power Pole just east of CP power drop

1220 Observed trespasser entry next to where warehouse #1 / Dock 101

1550 End of Day Calibration

1550 STATION #1 19,724 l/m

1550 " #2 20,290 l/m

1555 " #3 17,806 l/m

1600 " #4 18,628 l/m

1705 Depart Site

JLM
2/27/17

Location

Tues day
W-1015

Date

2-28-17

Project / Client

Cloudy CO. Thunder + Rain

0700 SAFETY Briefing

- Work in Pairs
- Lighting inside the buildings
- Need Manlifts to remove stas
- Some rooms still have stas
- Safety barricades for windows
- weather watch
- Additional Recon Trailer + Generator

0744 OSC Turner Task start

Bin 2 to not collect ARCON high volume samples today

1044 AMEREN Illinois responds to a smell of Nat. Gas from RM Lybarger.

1135 AMEREN indicates that Service Line 4", was disconnected in 2013.

AMEREN Supervisors
Henry Felton

Autumn Kamnick

1150 Continue working on Polrep 1

1225 Present Polrep 1 to OSC

1300 OSC says Search it

1705 Depart Site

- 0635 Arrive on-site
- 0700 Safety Briefing
- High wind alerts / dress
 - 107 Dock is complete
 - Gaylord Boxes Full of asbestos
 - Need R.O. Boxes
- 0735 Due to heavy rains experienced last night, OSC Turner elects to not collect High Volume samplers this day.
- 0950 Media Arrives on-site to work with OSC Turner for interview. Local Affiliate ABC 20 Reporter Matt Witkos and Videographer Matt? OSC provides interview and provides video (gopro) inside the building.
- 1115 Media Departs
- 1220 OSC indicates Hawkheiser coming on-site w/ FID. To conduct Nat gas survey to close out concerns w/ service disconnection of 2015

- 1507 Place call to Quantum Labs confirm PLM price of \$66.00 per sample for NIOSH 7402
- 1635 Speak w/ OSC about a total of 4 samples from Feb 9 & 10, 2017 as Lab reports that samples are "occluded, excessive particulate". OSC elects to defer till 3/2/17. These are ~~the~~ ^{the} baseline sample period and this is important baseline consideration of AIMP.
- 1710 Depart Site

[Signature]
3/1/17

24

Location

Thursday

Date

3-2-17

Project / Client

31°F WSW 10mph

- 0700 Safety Briefing
 • Natural Gas order
 • R5 employee will video inside the building.
 • washer/dryer for stas clothing.
- 0905 Mark Webber, IEPA arrives for Nat gas survey of hot zone.
- 1120 Nat gas Survey was inconclusive.
- 1250 Videographer - Toby Wall
 Report 5 EIC arrives
 Provide photos to Toby Wall
- 1420 Toby Wall departs
- 1710 Depart site - Demob for only start this week on this day

Flu 036
 3/2/17

25

Location

Monday

Date

3-6-17

Project / Client

cloudy 50°F Windy 10mph South
 Heavy Wind Forecast today/tomorrow

- 0635 Depart Home for T+ office in Kenton Mo to retrieve Bio-watch sample supplies for OSC Training in Angola, Ind.
- 0950 Arrive on-site
 • OSC does not want Aircon 2 sampling today.
 • IEPA Intern on site today w/ George Krebs.
- 1210 OSC wants the following:
- 1) Reduced Flow rates on Aircon 2 pumps
 - 2) Decrease Time frame of Aircons
 - 3) Move Air mon stations #2, #3 & #4.
- 1700 Depart Site

Flu 036
 3-6-17

Location TuesdayDate 3-7-17Project / Client 45°F Sunny winds WSW 18 mph
40 mph Gusts expected today

0647 Arrive on-site

0700 Safety Briefing

• High winds this day

0735 Setup DustTraks at new
Locations as per OSC
for Stations 2, 3, & 4.0835 Calup for AIRCON 2, Per OSC
instructions, Flowrate and
time of collection will be readjusted

0840 Station #1 = 12.685 l/min

0845 " #2 = 12.648 l/min

0850 " #3 = 12.224 l/min

0855 " #4 = 12.299 l/min

1027 All Locations working well
except #4 that has intermittent
pumps to VIPER system

Call Justin Hultens about this

1145 Justin sez he will fix repeater

1515 Station #1 11.747 l/min

1520 " #2 12.597 l/min

1525 " #3 10.751 l/min

1530 " #4 11.286 l/min

1710 Depart site

Justin 3/7/17Location WEDNESDAYDate 3-8-17Project / Client 40°F west 17 MPH clear
CONTINUE Loading Bulk PCM Debris

0625 Arrive at site

0659 Safety Brief

• High winds during Tarping

• Trucks backing up

0740 Deploy VIPER DustTraks
- START Buttons will adjust
digibox for Station #4
repeater. Zero cal all this day0815 Station #3 Antenna system
requires up grade.

0840 Calup AIRCON cassettes

0845 Station #1 = 12.623 l/min

0850 " #2 = 12.104 l/min

0855 " #3 = 12.436 l/min

0900 " #4 = 12.334 l/min

1041 Continue to experiment w/
antenna locations for #3 & 41415 Appears the repeater is now
working well ~~JA~~ ~~JB~~ ~~JB~~
for #4

1540 Airman station #1 = 12.402 l/min

1545 " " #2 = 11.877 l/min

1550 " " #3 = 11.803 l/min

1555 " " #4 = 12.044 l/min

CONT. Next page

- 1605 Info request for IEPA
 Truckloads Tons
 90 today 1925.18
 12 today 241.49
 4 estimate tomorrow 176.18
 1617 Sent above info to EFA
 SOGC George Krebs as requested
 1620 Time to remove Posttraks this
 day.
 - Reminder NO site work next
 week - OSC Training in Indiana
 1707 Depart site.

[Signature]
 3-8-17

- 0635 Arrive on-site
 0700 SAFETY Briefing
 • "Photos" of Joey Churnis
 and of his vehicles along
 with Keith Crane - owners
 of the site.
 • Week of March 20th.
 - New Tactics for ACM
 - will consider extending
 daytime hours
 - shut down next week
 OSC Training in Angola
 0740 Calup Station 1 = 15,464 l/min
 0745 " 2 = 16,971 l/min
 0750 " 3 = 15,946 l/min
 0755 " 4 = 15,829 l/min
 0850 Springfield IL Fire service
 reps arrive to view Vapor & particulate
 monitoring eqpt. - Matt Raymond
 1045 Matt Raymond - Training OFF.
 departs → will come back in
 the future
 1150 Make request to OSC about:
 1- 3 replacement AIRC on Batteries

2- Unit #2 Dusttrak has/needs
maintenance from factory due
to a "Pump voltage error",
during zero calibration day

1615 Time to perform end of calibration

1620 Station #1 = 12,645 l/min

1625 " #2 = 12,804 l/min

1630 " #3 = 11,541 l/min

1635 " #4 = 12,604 l/min

1709 Depart site

Steve

3-9-17

Note: Decont. 1 3/20/17
OSC Training in Angola, TX

First Day back from 1 week shutdown.

0735 Depart St. Louis for site

0930 Arrive on-site

Safety Briefing this day

- ManLift safety/operation

0950 Changing Tasks today

- New Decan trailer + hookup

- New Generator / more power

- Setup Debris chute for
asbestos Loadout.

- Setup containment / Lighting ect.

- New Conex Boxes for Supply storage

1040 OSC Relenke arrives on-site

w/ a replacement Dusttrak
(Note! Record the Serial #)

1218 Leave for Lunch

1300 Return to Site

1400 Contact Quantum Labs about

EDD Formatting.

- Results Look GOOD!

1700 Depart Site

Steve

3-20-17

Location Tuesday Date 3-21-17
 Project / Client 41°F NNE 7 mph

- 0700 Safety Briefing
- Setting up on the 8th Floor
 - Buddy System
 - Debris bags → light to ^{JS} carry down stairs
- 0721 OSC Behrke indicates no dust or asbestos sampling required today.
- 0740 Make phone calls to Batteries PLUS Rex Batteries
- Looking For AIRCON 2 replacement batteries as 4 units are not performing long life in the field, OSC Turner approved ERLC to acquire \$26.95 for eight is the best price
- 1245 OSC Behrke requests a site visit inside the hot zone for tour inside the many buildings.
- 1640 RM Lybarber asks if I can lock up site tonight as he is searching for parts
- 1757 Depart Site

Jim Duf

Location WEDNESDAY Date 3-22-17
 Project / Client 30°F Clear ENE 13 mph

- 0700 Safety Briefing
- Safety Harness use.
 - Stay away from overhead debris
 - chute is anchored.
 - Pre cleaning & Seal up windows
- 0725 Inform OSC Behrke that while batteries for AIRCON are changing for ^{JS} over 2 weeks, some batties require changeout. OSC indicates to not collect sample from Station 1 today.
- Calibrate ~~Pys~~ ^{JS} Pumps.
- 0740 STATION #2 14.283
- 0745 STATION #3 15.165
- 0750 " #4 15.021
- 1120 All Batteries replaced but fuse blown on #000 battery
- 1225 Take battery to Rexx for diagnosis
- End of Day Calibration
- 1610 STATION #2 13.867 $\mu\text{m}/\text{min}$
- 1620 STATION #3 14.027 $\mu\text{m}/\text{min}$
- 1630 STATION #4 17.794 $\mu\text{m}/\text{min}$
- 1710 Depart site

Jim Duf

Thursday

Date 3-23-17

Location

Project / Client 38°F ESE 17 mph C.O.R

First day of stas Removal of 4th Floor
Bakery Mix Bldg

0700 Safety Briefing.

- Personnel asbestos Monitoring today
- Be careful w/ heat stress
- Debris chute modifications

Calibration AIR CONZ This day

0720 STATION #1 = 14,953 l/min

0725 " #2 = 14,597 l/min

0730 " #3 = 15,271 l/min

0735 " #4 = 17,113 l/min

0819 Viper comms problem today

- will shut down & restart.
- will disassemble & dry off all antenna leads from rain today

1004 Suspecting That The new locations for the convex boxes are interfering with Viper comms. I will ask The RM how easily they can be moved.

MID DAY AIR CON CALS

1140 STATION #1 13,892 l/min

1145 " #2 14,161 l/min

1150 " #3 11,426 l/min

1155 " #4 16,375 l/min

CONTINUED

Thursday

Date 3-23-17

Location

Project / Client Light RAIN 41°F ESE 7 mph

0240 OSC Behnke indicates

That START is not needed

Tomorrow, → check & Hotel

1320 Purchase more AIR CONZ Fuses

1610 STATION #2 = 13,462 l/min

1615 " #3 = 14,264 l/min

1620 " #4 = 15,993 l/min

1625 " #1 = 14,744 l/min

1710 Depart site

Demobilize to St. Louis, MO

File Out
3-23-17

Location: Monday

Date 3-27-17

Project / Client 50°F ENE 7 mph Lt. Drizzle
 Work continues on 4th, 5th & 6th Floor Bakery
 area

0705 Depart St. Louis for site

0855 ~~Arrive~~ Arrive on site.

0900 Safety Brief.

- Try NOT to use the manlift

- ON 3/24/17, 85% of
~~55% of~~ boiler on 4th Floor
 was completed.

- OSC says NO AIRCON today
 due to rain

0925 Deploy Dust Tracks at new
 locations designated by OSC.

- STATION #4 move to near entrance

- STATION #3 move south

- STATION #2 move east.

- STATION #1 remains same

0930 OSC says START will reduce
 days on-site from 4 to 3 and
 reduce the number of day's
 for asbestos lab samples from
 3 days to 1 day per week.1107 OSC requests PolREP support
 for PolREP #2.

1240 Lunch Break

1317 Return to site

Location Monday (continued)

Date 3-27-17

Project / Client Light Rain 56°F N. 10 mph

Initiated 6th Floor

1525 Draft PolRep submitted
 to OSC for review and
 approval.

1610 Initiate instrumentation retrieval

1655 OSC indicates that PolREP
 is approved for release tomorrow

1710 Depart Site

Fluor
 3-27-17

Location TuesdayDate 3-28-17Project / Client Cloudy Lt. Drizell 49°F NE Bmph
work continues on 4th & 6th Floor & 5th Fl.

0700 SAFETY Briefing

- Watch your step
- Fall Protection, Tie-off, 300lbs.
- Ladder safety on metal grating.
- Stay away from Bakery Mr Bldg as bricks came loose & fell.

NOTE: • Midwest demolition mechanic will be escorted by OSC today. Springfield P.D. will be here in the event of Joey Chianis JR, coming to site as well.

• TT Chris Burns & Matt Villicana are expected on site today

0918 Mechanic from Midwest Demolition arrives to fix/startup the Trach hoe left behind as a result of the IEPA injunction, Polrep #2 uploaded and sent out. H&O, OSC indicates that the local county Landfill Sangamon Valley L.F. - Republic Sus.

1120 Chris Burns & Matt Villicana arrive on site

1210 Depart for Lunch

Location TuesdayDate 3-28-17Project / Client Overcast 57°F

1320 Return from Lunch - Meet w OSC

1410 Chris Burns & Matt Villicana depart site

1620 6th Floor is only 50% complete at this time.

4th Floor is 30% complete at this time

1710 3/23/17

8th Floor complete

3/24/17

7th Floor complete

Shirley
3-28-17

Location 3-29-17 WEDNESDAY DateProject / Client 45°F Cloudy

0700 Safety Briefing

- Careful not to break Fluorescent bulbs
- Higher winds Tomorrow/Tonight
- ERLLC Policy on Co. vehicles

0725 AIRCON calup

0730 Station #1 = 15.143 l/min

0735 #2 = 15.036 l/min

0740 #3 = 15.277 l/min

0745 #4 = 16.918 l/min

0850 All instruments performing well.

0931 Note: checking all AIRCON batteries today for fuses.

1120 MIDDAY check calup.

1125 Station #1 = ~~15.1~~ 12.026 l/min

1130 Station #2 = 13.958 l/min

1135 Station #3 = 14.907 l/min

1140 Station #4 = 13.847 l/min

Station #1 = 15.096 l/min

#2 = 14.946 l/min

#3 = 15.120 l/min

#4 = 15.621 l/min

Location WEDNESDAY (continued) Date 3-29-17Project / Client 53 Cloudy, Lite RAIN

1310 On-Board battery for unit #3

appears to not hold charge for all day NOTE: Take out?

1340 End of the Day (Calibration)

1345 Station #1 = 14.807

1350 Station #2 = 16.324

1355 Station #3 = 15.708 l/min

1358 Station #4 = 15.472 l/min

1420 Remove dust tracks

1720 Depart Site

Fluor
3-29-17

Thursday 3-30-19
 Location
 Project / Client 53°F cloudy con E 7 mph

0700 Safety Briefing
 - US Marshalls (undercover) on-site
 for stakeout of residences.
 - Changeable weather.

0910 Heavy rain with lightning
 - No asbestos samples today
 5th Floor is 60% done
 6th Floor is done

1120 Work resumes
 1255 Republic services arrives for meeting

- No burial wrapped because
 of double bagging class
 • Daily report with tickets the
 next day
 • Certificates of Disposal
 - 6:30 - 3 pm hours of ops
 - Need P.O.
 - Need permits
 • Call dispatch my resource

1420 Due to heavy rain, the OSC
 1530 Depart Site
~~391d to pull the instruments~~
~~3-30-19~~

Tuesday 4/4/19
 Location
 Project / Client 55°F W 10 mph

0655 Depart St. Louis, Mo.
 0854 Arrive on-site

0906 Catchup this day. AIRCONS
 0910 STATION #1 = 15,256 lbm
 0915 STATION #2 = 15,204 lbm
 0920 STATION #3 = 15,609 lbm
 0925 STATION #4 = 15,611 lbm
 1051 Perform security check
 of site perimeter w/ OSC
 1210 Depart site
 1239 Return to site

1250 STATION #1 = 13,415 lbm
 1255 STATION #2 = 14,463 lbm
 1300 STATION #3 = 12,717 lbm
 1305 STATION #4 = 14,028 lbm
 1250 STATION #1 = 15,307 lbm
 1255 STATION #2 = 15,693 lbm
 1300 STATION #3 = 15,722 lbm
 1305 STATION #4 = 15,094 lbm
 1404 Meet in City & TENA Stormwater
 MS-4 stormwater discharge

Date 4-4-17

(continued)

End of the day Calibration
 1615 STATION #1 = 15,113
 1620 " #2 = 14,368
 1625 " #3 = 15,732
 1630 " #4 = 14,636 -
 1635 Retrieve Dust Traks
 1720 Depart Site

[Signature]
 4-4-17

WEDNESDAY

4/5/17

Project / Client 46°F cloudy windy,

ENE 27 mph

0644 Arrive on site

0700 Safety Brief

- High wind ALERT - Gusty
- Electrical hazards

- 4th Floor is 80% done

- 5th Floor is done & move supplies to 3rd started

- Crews will move hotels next wk.

- NO AIR CON asbestos samples today

1135 call Chris Burns Plup on NPDES SAP

1140 Call John Dingo on SAP examples

1217 Call George Krebs

Team Celeste Crowley

NON-RESPONSIVE

" Darin Lacrone

1405 OSC Turner indicates that he will likely move forward w/ a SAP.

1644 Instate airport shut down Thursday

1719 Depart site

[Signature]
 4/5/17

Thursday

4/6/17

44°F Cloudy Gusty
 Work ~~STARTS~~ on 3rd Floor Bakery mill
 engers 4th "

- 0650 Arrive on site
 0700 Safety Briefing
 • If necessary, use torch or
 Saw-zall for getting into
 tight places,
 • falling bricks
 • Pipewrap between floor
 0722 Cal up for Aircons
 0735 Station 1 = 15.223 l/min
 0740 Station 2 = 15.645 l/min
 0745 Station 3 = 15.582 l/min
 0750 " 4 = 15.489 l/min
 0837 Station 3 digi box is not
 operational.
 1130 Mid Day Calibration
 END TIME REST TIME
 #1 1135 13.705 l/min 1140 15.168 l
 #2 1145 12.872 l/min 1145 15.622
 #3 1150 11.446 l/min 1150 15.471
 #4 1155 12.621 l/min 1155 15.362

Thursday

4/6/17

(cont)

- 1537 End of Day Calibration
 1540 #1 = 15.091 l/min
 1545 #2 = 14.548 l/min
 1450 #3 = 14.582 l/min
 1550 #4 = 15.138 l/min
 1720 Depart Site
 Return to St. Louis, MO

Flu 750
 4/6/17

Location Tuesday Date 4-11-17Project / Client 50°F Cloudy
4th Floor done on 4/10/17 Now on 3rd

0640 Depart St. Louis, mo

0850 Arrive on-site.

OSC does not require
Aircon asbestos samples
Today0955 Support R.M. with lab
methodologies for NPDES
discharge permits1150 Phone call from John
Keller 217-381-3497
it will bring a former
employee here today1220 John Keller & Bill Guinn
(217) 416-8841 site visit1510 Send OSC local newspaper
link that J. Chesnick
pleading guilty and will
be sentenced on Aug 11, 20171640 Pull instruments from
the field this day.

1710 Depart Site

4/11/17

John Guinn

Location WEDNESDAY Date 4-12-17Project / Client 40°F Clear WNW 1-mph
3rd Floor 60% done 2nd Floor Just started

0700 Safety Harness Drillings

- Do not loop lanyard around
- Do not used double lanyard for 2nd person

- VSC I-Beam locks

0810 Instruments deployed
this day

#3 Dust Trak still down

1000 Don Ambrose

Cutting Edge yard source
came by to meet w R.M.
who is gone at this time

1104 Meeting w I EPA Darren

Lacrone & OSC Turner to
explore NPDES discharge of
accumulated rainwater in
complex of basements.I EPA Lacrone indicate they
will put the USEPA permit
request on the top priority1240 OSC Turner indicates a
preference to Bypass the
NPDES App process

1635 Depart Site

John Guinn 4/12/17

Location Thursday Date 4/13/17
 Project / Client 54°F SSE 9
2nd Floor 20% 3rd Fl 80%

0700 Safety Brief

- Swing room of excavator
- Bed's are active
- Removing stps outside bay

◇ 70 ACM bags

0740 OSC wants ERRS to attend to
 asbestos outside of the Southside
 Bakery Mix Building in a secure
 area.

Calibration of AIRCON Pumps Today

0745 Station #1 = 15.404 l/min
 0750 " " 2 = 15.518 l/min
 0755 " " 3 = 15.621 l/min
 0800 " " 4 = 15.483 l/min

1010 College Student, Taylor
 Moore arrives to interview
 OSC Turner re: History
 of asbestos at Pillsbury.

1135 Station #1 14.467 l/min
 1140 " #2 13.112 l/min
 1145 " #3 14.628 l/min
 1150 " #4 14.673 l/min

Location _____ Date 4/13/17
 Project / Client (Continued)

1140 Station 1 15.392 l/min
 1145 Station 2 15.528 l/min
 1150 Station 3 15.582 l/min
 1155 " 4 15.468 l/min
 1351 Channel 20 news
 Service arrives
 for 1730 newscast

End of the Day Calibration

1520 #1 = 15.129 l/min
 1530 #2 = 12.278 l/min
 1540 #3 = 15.372 l/min
 1550 #4 = 15.582 l/min

1727 Depart Site

TBinc will prepare C.O.C.
 on 4/14/17

[Signature]
 4/13/17

Location TuesdayDate 4-18-17Project / Client 58°F Swinds @ 12 mphWorking on main floor of bakery mix

0644 Depart St. Louis

0840 Arrive Springfield

- OSC Sonja Vega is here for most of the week.

- No AIRCONS for Stos Sampling will perform tomorrow

0955 RM Lybarger request support for Lab Test methods

1144 Call Rex Battery about damaged chords for Dist tanks

1555 Initiate Dist tank instrument shut-down

1704 Depart Site

[Signature]
4-18-17

Location WednesdayDate 4-19-17 53Project / Client 63°F Mostly Cloudy Humid S Brk
30% of main floor is done.

0700 Safety Brief

- High Lift safety

- Close attention

- Not worth replacing

- 144 bags of Stos

- Electrical Safety

0720 Cal-up this day for High volts

0725 STATION #1 = 15,267 l/min

0735 " " #2 = 15,143 l/min

0745 " " #3 = 16,214 l/min

0755 " " #4 = 16,746 l/min

Even after tying the connectors on #4, still

Not working this day

Mid Day Cal-up

1135 STATION #1 = 15,249 l/min

1140 " " #2 = 15,196 l/min

1145 " " #3 = 15,164 l/min

1150 " " #4 = 17,329 l/min

1344 Unit #4 still not communicating

- Change chords

- Check for antenna

- Check new location

4/17/17

(cont.)

- 1437 Unit #4 working nominally
New Chord Fixed this.
- 1610 STATION #1 13,481 l/m
- 1620 STATION #2 12,765 l/m
- 1630 STATION #3 13,184 l/m
- 1640 STATION #4 14,347 l/m
- 1702 Depart Site

Joe Duf
4-19-17

Thursday

4-20-17

71°F Cloudy COR Humid SW 15
Main Floor Bakery Mix work continues
50% complete

- 0700 Safety Briefing
- Loose Pipes still observed
 - Wood Floors are rotten in series "B"
 - Mindful of exclusion zones
 - Harness Safety
- 0724 Setup DustTraks at 4 locations. Unit #4 is working well today.
- 0840 Scatterred Showers expected today. RM Mother-in-law passed
- 0942 ERAS Crew is reporting vandalism to The Trackhoe. It appears to be a B-B-Gun or Shotgun pellets
- 1110 Collected representative sample from Pit near Bakery Mix Building. This is for NPDES discharge approval w/ EPA this is for The Full suite of lab testing. AQUEOUS MEDIA Labeled AS: PM-SW01-042017
- One ICE

Location Thursday (cont) Date 4/20/17

Project / Client _____

1150 Collect AQUEOUS sample
from stain well inside
The Bakery Mix Building.
SAMPLE IS NPDES ALSO.
Labeled AS:

PM-SW02-042017

Full Suite of Lab Parameters

1307 Ice down two coolers of
samples for hottest delivery
to TekLab in Collinsville
Illinois.

1625 Depart Site.

Flu JTB
4/20/17

Location Monday Date 4/24/17Project / Client Clear 58°F

0650 Depart St. Louis

0847 Arrive at The Site

- OSC indicates no
high volume air samples today
- Crew are 70% complete
of Series "A" WAREHOUSE

0922 Setup DustTrak

perimeter monitors w/ Vipers

1120 The grind of daily work
regiment has set in

1710 Depart Site

Flu JTB
4/24/17

Tuesday

4/25/17

52°F SW 9 mph Cloudy

- 0700 Safety Brief
- Bags = 48
 - 12 Bulbs
 - Maintain contact w/ others
 - Wild animals
 - 75% Main Floor

0726 OSC Turner indicates no asbestos sample cassettes This day and rest of this week

0825 All DustTraks deployed

1210 Depart for Hotel + Check in

1237 Return to Site

1610 Retrieve all DustTraks

1715 Depart Site

Flu Bird
4/25/17

WEDNESDAY

4/26/17

55°F Cloudy

Close to completion of Main Floor

0700 Safety Briefing

- Man Lift Safety Rules
- OSC Turner indicates That STAVROS Emmanouil will be here next week
- OSC says no Asbestos samples today

0728 Set out DustTrak instruments today

0920 - All is well

No dustTrak issues today

0316 OSC Turner says to demob earlier this day

0415 Depart Site

Flu Bird
4/26/17

Location TuesdayDate 5/2/17Project / Client 50°F Clear Windy in 22 mph
Working on "C" Mill Warehouse #6

- 0650 Depart St. Louis STATUS
 0855 Arrive at The Site OSCEMANN
 WILL SETUP DustTraks + Aircons
 Today due to rain expected
 tomorrow + Thursday
 CALUP Aircons
- 0915 STATION #1 15.274 L/min
 0925 STATION #2 15.081 " "
 0935 STATION #3 15.355 L/min
 0945 STATION #4 15.457 " "
 1040 Perform site safety check.
 MID DAY Cal + battery
- 1140 STATION #1 14.378 L/min
 1150 " #2 14.678 L/min
 1200 " #3 15.204 L/min
 1210 " #4 15.118 L/min
 LAST DAY CAL-UP.
- 1620 STATION #3 = 15.292 L/min
 1630 " #4 = 14.763 L/min
 1640 " #2 = 13.875 L/min
 1650 " #1 = 14.879 L/min
 1720 Depart Site

5/2/17

Jon [Signature]

Location WEDNESDAYDate 5/3/17Project / Client Cloudy 46°F C.O.R. ESE 7 mph
WORKING on "C" Mill Warehouse 6
Main Floor. 1590 down

- 0650 ERRS SAFETY Brief,
 • ER LLC Multiple Answer
 Test (written) many topics
 • Alleged Gun-Fire in the
 neighborhood at 0300 hrs.
 This morning.
 • Be Careful w/ plastic pipe
 • 133 bags yesterday
 • Bulbs 12
- 0745 Deploying DustTraks
 with Viper today. No
 Aircon 2 asbestos sampled
 Today or Tomorrow 5/4/17.
- 0850 Remove tree limbs
 on the east side of the
 site due to safety
 concerns + Damage potential
 to USEPA ATV.
- 1703 Depart Site

5/3/17

Jon [Signature]

Thursday

5/4/17

400F' NW 2' length light/mod drain
working on main floor of "C" M, II warehouse #6

0700 Safety Briefing

- High winds Alert

- ~30% done main floor
of "C" M, II warehouse #6

0721 No AIRCON 2 asbestos
collected today1147 High winds collapsed
The stand to Station 1
but can be fixed with
super glue, Dust Trak
is working well

1703 Depart Site

Demob to St. Louis

Fluor
5/4/17

Tuesday

5/9/17

Clear Humid 62°F WNW 6 mph

0833 Arrive from St. Louis
To The Site0847 OSC Turner says
No particulate or asbestos
sampling today due
to grass cutting work
performed by ERRS Team
Today

1701 Depart Site

Fluor
5/9/17

Location Wednesday Date 5/10/17Project / Client Clear Humid 58°F Evg 5mphSeries "B" First floor done on Locker RM
80%

0700 Safety Briefing

- Hydration
- Moving to a new floor / Building
- ACM Bags ~~54~~ totals
- Bulbs 107
- Ballasts 48
- More 4

Calibration Air can 2

0725 Station #1 15,141 L/min

0735 " #2 15,431 L/min

0745 " #3 15,192 L/min

0755 " #4 15,696 L/min

Mid day calc

1125 Station #1 15,003 L/min

1130 Station #2 15,198 L/min

1135 Station #3 14,647 L/min

1140 Station #4 14,891 L/min

End of day Calibration

1555 Station #2 15,268 L/min

1610 #3 15,504 L/min

1620 #4 14,948 L/min

1630 #1 14,778 L/min

1715 Depart site

Jon Ray 5/10/17

Location 5/11/17 Thursday DateProject / Client Cloudy Drizzle 61°F N 8 mph

0700 Safety Briefing

- Collecting Mercury - Small B
- 0 Bulbs 10 Ballast
- 134 bags
- Asbestos Free stickers?
- Allowing Ley Metals the ability to remove equip that belongs to him.

0722 OSC Turner says no asbestos samples today.

Today is intended to be a short day. START Binz will demolish today.

0945 IEPA reps Krebs & Kinsley Tour site.

1150 IEPA reps very happy with progress of removal

1225 EPRS crew continue glove bag removal at the Grocery Mix warehouse #3 5th Floor today.

1704 Depart site

Jon Ray 5/11/17

Location Tuesday

Date

5/16/17

Project / Client Clear Humid 76°F SE 17 mph
5th Floor & roof of Grocery Mix Building

0655 Depart Site, for Springfield,

0850 Arrive at site

Calibration this day

0925 STATION #1 15.208 L/min

0935 " #2 15.856 L/min

0945 " #3 16.171 L/min

0955 " #4 15.362 L/min

1020 OSC request that next POLAR be ready for send out on 5/17,

Mid-Day Calibration

1125 STATION #1 15.006 L/min

1130 STATION #2 15.416 L/min

1135 STATION #3 15.546 L/min

1140 STATION #4 14.823 L/min

End of Day Calibration

1625 STATION #1 14.563 L/min

1635 " #2 15.173 L/min

1645 " #3 15.554 L/min

1655 " #4 13.423 L/min

1722 Depart Site,

John J. King
5/16/17Location Wednesday

Date

5/17/17

Project / Client P.C., Humid 72°F S 25 mphWorking on Grocery Mix Warehouse #3
3rd Floor & Roof

0655 Arrive on-site

- ERRS started new hours today
due to hotter daytime temps- OSC Turner says no kinetic
samples today, just Dusttraks0747 All Dusttraks deployed
and functioning nominally.1055 ERRS Foreman Glaspy
indicates they will finish
the 5th Floor of Grocery
Mix Warehouse #3 today.1240 START will suit up and
support ERRS to move
supplies down to the
4th floor of Grocery Mix
#3 Warehouse.1555 Perform site security
check.1640 Initiate pulling Dusttraks
from deployed locations

1721 Depart Site

John J. King
5/17/17

Location ThursdayDate 5/10/17Project / Client Clear Humid 72°F EQ Strong Storms
SSW 14 mph

0705 Arrive on site

- ERPS crew started early today
- OSC says no AIRCON 2 samples today - once per week.

0814 DustTraks deployed.

1027 WinAS causing occasional + intermittent spikes in instruments. START will monitor online via ERT web portal.

1310 WinAS are more westerly now. Spikes in instrument have dropped.

1620 OSC indicates START to pull instruments for return to St. Louis This day

1658 Depart site

Jim Day
5/10/17

Location TuesdayDate 5/23/17Project / Client Cloudy 61°F Lite rainCompleted 5th Floor series 'B'
Grocery Mix WAREHOUSE #3

0640 Depart St. Louis

0852 Arrive on-site

- No Safety Brief for start as ERPS already at work

- OSC does not desire AIRCON 2 air samples today

0948 DustTraks deployed.

1035 - START conducts site safety inspection → all ok.

1140 - ERPS working on the 4th floor today of Grocery Mix #3 warehouse

1320 OSC requests support for development of POLYMER #4,

1632 Time to pull all instruments from the field.

1715 Depart Site

Jim Day
5/23/17

- 0647 Arrive on-site
 Crew working 6-4:30 Today
 - Meet w OSC
 - Place asbestos samples today
- 0710 Calibration This day
- 0715 STATION #1 = 14.796 l/min
- 0855 STATION #2 = 15.304 l/min
- 0725 STATION #3 = 14.308 l/min
- 0735 STATION #4 = 15.026 l/min

Mid day Calibration

- 1115 STATION #1 = 14.624 l/min
- 1125 STATION #2 = 15.292 l/min
- 1135 STATION #3 = 14.216 l/min
- 1145 STATION #4 = 14.091 l/min

End of the day Calibration

- 1345 STATION #1 = 14.028 l/min
- 1535 " #2 = 12.497 l/min
- 1615 " #3 = 14.166 l/min
- 1625 " #4 = 14.017 l/min

1655 Depart site

FLW 5/24/17

- 0655 Arrive on-site
 ERSC now started working today
 due to longer days and higher
 humidity.
 - No asbestos air samples today
- 0747 - Dust Trak Setup &
 deployment.
- 0935 OSC requires changes
 to Pol Rep #4.
- 1040 Springfield Fire Dept,
 Chris Richmond comes by
 for site tour.
- 1215 OSC wants start to
 demob early today
- 1430 Initiate removal
 of instruments This day.
- 1516 Depart site

FLW 5/25/17

Location Tuesday Date 5/30/17Project / Client 62°F P.C.

Comms working on 4th Floor of Grocery Mix

- 0849 Arrive on site
 OSC Turner indicates not to collect
 AIRCON High Volume asbestos
 samples today, just Dust Traks
 w/ Viper Comms today
- 1040 No important site observations
 This day.
- 1140 Lunch Break
- 1205 Return from Break
- 1635 Depart Site

File to
 5/30/17

Location Wednesday Date 5/31/17Project / Client 60°F Clear NW Humph

- 0651 Arrive on site
 - Setup Dust Traks/Viper + AIRCON
 asbestos Pumps Cal up
- 0715 Station 1 = 15,566 l/min
 0735 Station 2 = 15,613 l/min
 0745 Station 3 = 15,375 l/min
 0755 Station 4 = 15,378 l/min
- Mid-day Calibration
- 1125 Station 1 = 15,497 l/min
 1135 " 2 = 12,621 / 15,562
 1145 " 3 = 14,654 l/min
 1155 " 4 = 13,337 l/min
- End of the day calibration
- 1610 Station 1 = ~~15,546~~ 15,546 l/min
 1535 #2 = 11,334 l/min
 1545 #3 = 14,545 l/min
 1555 #4 = 13,311 l/min
 1710 Depart Site.

NOTE: After new calibration
 worked well today.

File to
 5/31/17

- 0625 Arrive on-site.
- 0636 OSC does not require Asbestos air sampling today.
- 0731 FOSC George Krebs arrives on-site. He request the chance to review/comment on Pol REP #4. START told him to speak w OSC.
- 0844 Dust TRAKS setup This day
- 0921 Spoke to OSC about need for additional budget increase he agrees to incremental finance increase only. OK to Submit to him TDD amendment #3.
- 1250 OSC approves Pol rep #4, and request START to push #4 to web portal
- 1310 OSC executes TDD Amend. #3 Sean & Send to Program MGR
- 1425 Remove instruments
- 1517 Depart site
JN
6/16/17

- 0655 Depart St. Louis, Mo
- 0837 Arrive to Site. OSC not here
- Deploy AIRCON2 Pumps today.
- 0845 Calup This day
- 0855 STATION #1 = 15.479 L/min
- 0905 " #2 = 15.452 "
- 0910 " #3 = 15.155 "
- 0915 " #4 = 15.177
- Mid Day Calibration
- 1135 STATION 1 = 14.862 → 15.504
- 1140 " 2 = 11.645 → 15.378
- 1145 " 3 = 14.739 → 15.146
- 1147 " 4 = 15.043 → 15.043
- End of the day Calibration
- 1535 STATION 1 = 15.372 L/min
- 1605 STATION 2 = 14.988 L/min
- 1610 STATION 3 = 15.089 L/min
- 1615 STATION 4 = 14.891 L/min
- 1635 Depart Site
- JN
6/16/17

76

Location WednesdayDate 6/7/17Project / Client 58°F clear cool NNE 4mph.2nd Floor "C" Mill Warehouse #6

0625 Arrive on site.

Big day for DustTRAK
Maintenance Today.

All dusttraks will have

Filter change out This day.

0711 OSC Turner does not desire
Air Con High Volume asbestos
samples collected today.1150 All Filters changed in
DustTraks at this time

1635 Depart Site

JW
6/7/17Location ThursdayDate 6/8/17 77Project / Client 67°F clear2nd Floor "C" Mill Warehouse #6

0630 Arrive on site

0644 OSC does not require

High Volume asbestos

sampling This day.

Just performing DustTraks
with Viper Comms.

1630 Depart Site

JW
6/8/17

Location Thursday

Date

6/15/17Project / Client Hot 86° FOnly day onsite this week → Pioneer
asphalt

- 0846 Arrive onsite
OSC only requires DustTrak
with Viper Comms Today
- ERRS continues to
work on Removal 3rd "C"
1020 - Discuss TDD Amendment #4
w/ OSC Turner.
- Waxy's incremental
financing only,
- OSC does not want to
review budget estimates
- increments should be
larger due to LOE.
1140 OSC say short day for me.
1301 R.M. Lyberger concerned
that damaged floors in
"C" Mill is big safety concern.
STANT will not investigate.
1247 Depart site

JK
6/15/17

Location Tuesday

Date

7/25/17Project / Client ERRS working on 7th floor
of Warehouse #2

- 0655 Depart St. Louis
0852 Arrive on-site.
- Because the site grass
will be cut on 7/26/17,
and OSC Turner tasked
last week for 1 round
of Perimeter Sampling,
AIRCON 2 samples will
be collected this day
AIRCON 2 Cal-up this day
0935 STATION #1 = 15.403 l/min
0945 " #2 = 15.495 " "
0950 " #3 = 15.696 " "
0955 " #4 = 15.722 " "
MID DAY Cal-up
1135 STATION #1 = 15.368 l/min
1140 " #2 = 14.510 " "
1145 " #3 = 13.956 " "
1155 " #4 = 14.962 " "
LAST OF DAY Calibration
1605 STATION #2 = 13.246 l/min
1615 " #3 = 12.891 " "
1620 " #4 = 13.423 " "
1625 " #1 = 14.563 " "

WEDNESDAY

07/26/17

Hot clear 74°F Humid
Still on Floor 7 of warehouse #3

- 0600 SAFETY Briefing
- TOPIC Electrical Safety.
- 0719 - Setup DustTraks only today.
- 0826 - Prep 7/25/17 samples for FEDEX to Quantum Labs
- 1025 Drop off Samples for FedEx delivery to Quantum Labs
- 1210 OSC Vega does not require any START Support today
- 1635 Depart Site

JK
7/26/17

Thursday

7/27/17

Hot Clear Humid
Wrapping up Floor 7 of warehouse #3

- 0600 Arrive on site
- 0835 Only DustTraks today
- 0845 Depart site to find bumper feet for Aircon 2 battery Packs for feet that are deteriorating from heat.
- 1010 Correspond w/ Jessie at USEPA Willowbrook as to replacement feet that are much cheaper than from Sensidyne.
- 1530 Depart Site
Demob from Site

JK
7/27/17

Location Tuesday

Date

8/8/17Project / Client Clear 68°F Low humid SSW 12 mphworking basement of warehouse

Setting up Haz cat today in Dock 107

0625 Depart St. Louis.

0810 Arrive Springfield, IL

0835 OSC wants Haz cat set up
along with Air Monitors +
High Vol pumps in Dock 107
and Universal waste storage
area of warehouse #7Also, OSC desire 2 Air mon
stations inside for data
to support no respiratory
protection for Universal
waste storage area.

0935 Station #2 15.527 l/min.

0950 Station #6 inside Dock 107

" " 15.925 l/min

1020 Station #7 South wall, warehouse #7
15.821 l/min

Midday check for Air con pump

1140 Station #2 12.247 / 15.622

1150 " #6 15.459 / 15.459

1155 " #7 15.598 / 15.598

Location

Tuesday

Date

8/8/17

Project / Client

1405 Station #2 = 13.671 l/min

1410 Station #6 = 15.046 l/min

1415 " #7 = 13.174 l/min

All instruments removed.

1437 Depart Site

Fin
8/8/17

- ERAS Warehouse #7 basement
- Remove RCRA Empty drums

0651 Arrive on site

0710 Setup DustTraks at:

Station #1 - Trailers

" #2 - outside Dock 107

#6 - Inside Dock 107

#7 - Inside Warehouse #7

0740 RM Lysbarger & Self into Warehouse #7 To cull-out RCRA empty Containers.

1135 Totals for RCRA empty containers are:

55-gal Steel = 8

" " Fiber = 6

" " Poly = 7

5-gal pails = 23

1-gallon = 3

Compressed Gas = 5

1350 - Conduct Site Security check

1542 OSC Turner Returns

1632 Depart site

Jim [Signature] 8/9/17

0700 Arrive to site.

- Set out 4 DustTraks in VIPER

- OSC does not want Aircur2

0836 Place phone call to Quantum Labs to provide approval for TEM + REM Testing for Samples Collected on 8/8/17. Spoke to Peyton Ambrey about this,

1015 Peyton Ambrey confirms samples have arrived to lab

1027 - OSC Turner + START enter "C" Mill Warehouse #6 to photo doc inaccessible stps on the floors of 4, 5, 6, 7, 8 & 9

4th Floor

2 vertical pipe runs 12' each

5th Floor

3 vent runs \approx 12'

1 vent run \approx 6'

6th Floor

1 vent run \approx 12'

1 vent run \approx 3'

7th Floor

3 vert runs $\approx 12'$ each

8th Floor

2 vertical runs $\approx 12'$ each

9th Floor

1 horizontal run 15' of 1" line

1 vertical " 10' of 1" line

1 horizontal overhead $\approx 34'$ 8" line

1 vertical overhead $\approx 6'$ 8" line

NOTE: All pipes are 2" diameter
steam pipes except as noted.

1250 "C" Mill inspection was
safely conducted & photo-
documentated. This will be
in the project final report.

1315 Brief Lunch today.

1422 Instruments have been
removed & on charge.
Depart Site

FM Jry
8/10/17

Very Hot & Humid. 92°F or more today

0632 Depart St Louis.

0810 Arrive on site.

- OSC want to discuss asbestos
sample results from 8/8/17
regarding Dock 107 & warehouse.
Told him that they passed.

- He indicates that START
is to initiate Haz-cat
work in these areas.

- No Level "C" required,
except for sample unknowns
which is done as Level "B"

1010 - Arrangement are made to
acquire chlor-oil test
kits by ENRS.

- Due to extensive amounts
of Haz-cat work, this
log book will not be used to
record Haz met info. like
Fingerprint ID & inventory

1115 Depart Site

FM Jry
8/15/17

Location Thursday Date 9/7/17

Project / Client

Hot & Humid today

- 0658 Arrive on-site JB
 - HAZ-cat + Bulk consolidate
 consolidation will wrap up
 today.
 - START has completed an
 inventory of remaining
 wastes that require
 Lab Pack disposal.
 1225 ERAS R.M. is satisfied
 w/ chemical inventory
 and his team efforts
 with Bulking/consolidation
 of 622 containers
 of mostly oils/lube
 oils & cooking oils.
 1420 - Next week, OSC Reusch
 will pickup all instrument
 & the ATV.
 - START will assemble & box
 up all EPA OWNED EQUIP.
 1522 Depart site

Jim Day
9/7/17

Location Monday Date 9/11/17Project / Client Clear local 62°F

- 0647 Depart St. Louis
 0831 Arrive to site
 - Pack up all Instrument
 WEIGHING the Ballast's per use
 1 small = 3.925 lbs
 1 medium = 6.80 lbs
 1 large = 13.325 lbs
 The above represent the weight
 of each size PCB Ballast
 1210 Lunch
 1258 Return from Lunch
 1440 All instrument's filters
 changed, cleared of data
 repacked. Removing
 Viper antenna array now.
 1402 All antenna's removed
 1602 Depart site

Jim Day
9/11/17

Tuesday

9/12/17

Cool / cloudy 59°F

- 0628 Arrive on-site
- 0710 OSC Turner request that
START BIN2:
- 1) Change lock on Dock 107 Door
 - 2) Generate Inventory for Lab Pack chemicals as a few more containers have been found by ERPS
- 0805 START BIN2 will support and document ERPS crews in the final bulking and reconsolidation of waste oils.
- 1320 This appears to be a 2-day job as the old & damaged totes and drums will be smashed or cut up
- 1637 Depart site

JM
9/12/17

WED

9/13/17

cool pleasant 65°F expected

- 0701 Arrive on-site
- Safety Briefing → using air powered equipment
 - line Dranking of compressed air.
- 0811 Bulking & consolidation continues of all waste oils. This will be the last day.
- 0830 Site security checks ok
- 0955 ERPS crew continue to work on packing 4' light Bults into cardboard Boxes.
- 1037 George Kochs arrives to return keys for dusttrucks. He will be given a new set of Keys for locking Dock #107
- 1145 R.M. wants to go over lab pack inventory.
- 1210 Inventory reviewed and accepted by R.M.
- 1704 Depart site

92

Location

Tuesday

Date

9/19/17

Project / Client

Prepping for START Demos
clear warm 79°F

10638 Depart St. Louis

10844 Arrive on-site,

- OSC request Polrep #6 support
 - need to show demob. structure
 - inventory of wastes
 - Turning security over to IEPH

1122 Polrep #6 is done and shared w/ OSC,

1250 OSC request that I remove all equipt. cases from the VIPER Room. ERAS will clean the Trailer today.

Paul Reuschl will drive here on 9/20/17 to pickup all EPA instruments.

1330 Chris Redmond arrives to Tour where Haz-mat is stored.

1350 Depart site

SK [Signature]
9/19/17

Location

Wed

Date

9/20/17 93

Project / Client

Last day on-site for START

0702 Arrive on-site

- OSC has minor comments back on Polrep #6
- Approval to upload to ~~PHSA~~ portal,

1047 Pictures + Polrep upload is completed.

1440 All office Equip and EPA Supplies loaded to deliver to Chawoco site this week.

1540 OSC says ok to depart site

9/20/17
[Signature]

Location _____ Date _____

Project / Client _____

C
C

BLANK FROM HERE



/

/

/

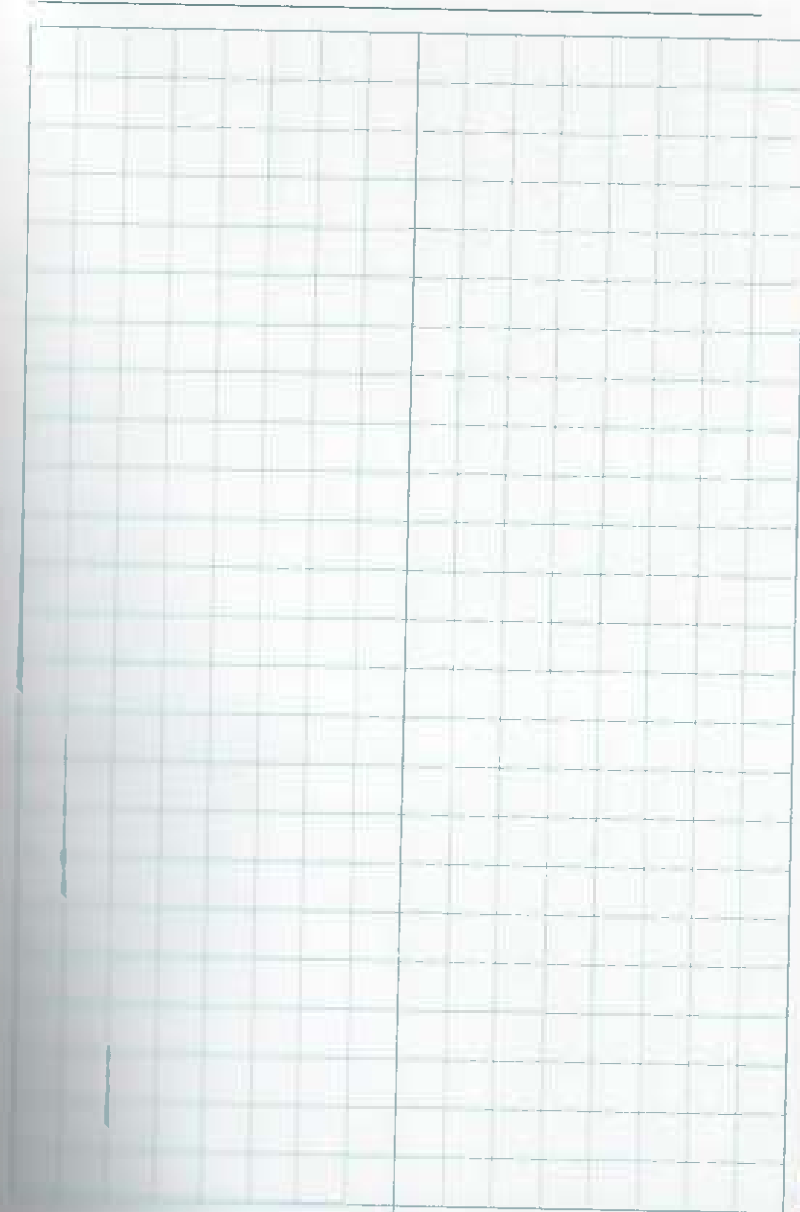
/

/

/

Location _____ Date _____

Project / Client _____



INCH

MEASUREMENT CONVERSIONS

U.S. to METRIC

inch x 2.54 = centimeter
 foot x 0.3048 = meter
 yards x 0.914 = meter
 mile x 1.609 = kilometer
 quart x 0.946 = liter
 gallon x 3.785 = liter
 ounce x 28.349 = grams
 lbs x 0.454 = kg
 mpg x 0.245 = km/ltr
 mph x 1.609 = km/hr
 °F to °C (F - 32) x .555

METRIC to U.S.

centimeter x 0.394 = inch
 meter x 3.28 = foot
 meter x 1.094 = yards
 kilometer x 0.621 = mile
 liter x 1.057 = quarts
 liter x 0.264 = gallon
 grams x 0.035 = ounce
 kg x 2.205 = lbs
 km/ltr x 2.354 = mpg
 km/hr x 0.621 = mph
 °C to °F (C x 1.8) + 32

ENGLISH LINEAR MEASUREMENTS

Electronics 12 inches = 1 foot
 36 inches = 1 yard
 3 feet = 1 yard
 1,760 yards = 1 mile statute
 2,026.8 yards = 1 mile nautical
 5,280 feet = 1 mile statute
 6,060.4 feet = 1 mile nautical
 63,360 inches = 1 mile statute
 72,963 inches = 1 mile nautical

MAP SCALES—ENGLISH & METRIC

SCALE	1 INCH =	1 CENTIMETER =
1:10,000	833.33 feet 254 meters	328.1 feet 100 meters
1:25,000	2,083.3 feet 635 meters	820.2 feet 250 meters
1:50,000	4,166.7 feet 1,270 meters	1,640.4 feet 500 meters
1:63,360	5,280 feet 1,609.3 meters	2,078 feet 633.6 meters
1:100,000	8,333.3 feet 2,540 meters	3,280.8 feet 1,000 meters
1:250,000	20,833 feet 6,350 meters	8,202 feet 2,500 meters
1:500,000	41,667 feet 12,700 meters	16,404 feet 5,000 meters

4400 TV
 KR-41c

Channel Master, com

Rite in the Rain
 ALL-WEATHER WRITING PAPER

Tivo 44.00

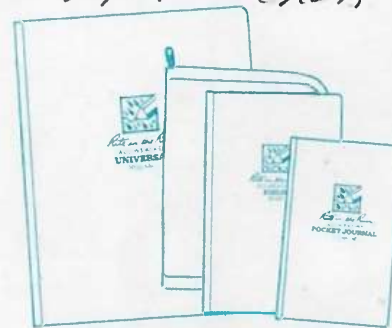
Table

Outdoor writing products*
 for Outdoor writing people

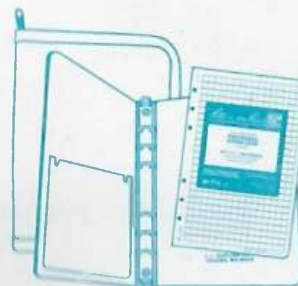
Table.com → foko at ench



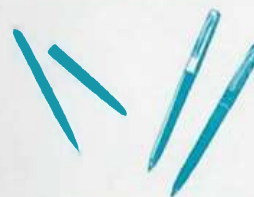
Copier & Ink-Jet Paper



Bound Books

Loose Leaf
with Ring Binder

Memo Books



All-Weather Pens



Notebooks

RiteintheRain.com

Made in the USA

APPENDIX D
PHOTOGRAPHIC DOCUMENTATION



Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 1

Photographer:

Tom Binz

Date: 1/10/2017

Description: (East) Main gate entrance to the Pillsbury Mills Site. Series "B" and "C" Buildings shown in the background.



Photograph No. 2

Photographer:

Tom Binz

Date: 2/15/2017

Description: (South) ERRS technician spraying water upon ACM impacted demolition debris.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 3

Photographer: Tom Binz

Date: 2/16/2017

Description: (Southeast). Perimeter air monitoring and sampling Station #4 location on 15th Street. Antenna for Viper wireless communications to host computer, DustTrak particulate meter encased on tripod stand with high volume pump with sample cassette.



Photograph No. 4

Photographer:

Ron Lybarger

Date: 4/12/2017

Description: (North) ERRS technician preparing to place glove-bag around ACM pipe-wrap insulation on the 3rd floor of the "Bakery Mix" Building.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 5

Photographer:

Tom Binz

Date: 3/21/2017

Description: (North)

Example of damaged, weathered, friable asbestos insulation prior to removal.



Photograph No. 6

Photographer:

Tom Binz

Date: 4/13/2017

Description: (Northeast)

ERRS technicians prepare to place glove-bag around ACM pipe-wrap insulations outside of the Main Office Building.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 7

Photographer:

Tom Binz

Date: 6/8/2017

Description: (North)
ERRS technicians initiate assembly of debris chute used to place/load double-bagged ACWM into roll-off-box from Grocery Mix Warehouse #3 Building.



Photograph No. 8

Photographer:

Tom Binz

Date: 6/28/2017

Description: (West) Interim storage of fluorescent light bulbs (Universal Waste) inside Loading Dock #107.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 9

Photographer:

Tom Binz

Date: 9/13/2017

Description: (South)
Intrinsically safe air-driven transfer pump used by ERRS technicians to bulk consolidate compatible liquid wastes after hazardous categorization identification by Tetra Tech START.



Photograph No. 10

Photographer:

Tom Binz

Date: 8/10/2017

Description: (West) Example showing some of the inaccessible ACM pipe-wrap on the 4th Floor of the "C" Mill Warehouse #6 Building.





Photographic Documentation

Client: U.S. EPA Region 5
Site Name: Pillsbury Mills Site
Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.
TDD Number: S05-0001-1701-003
Date: November 2x, 2017

Photograph No. 11

Photographer:
Tom Binz

Date: 8/10/2017

Description: (West) Example showing some of the inaccessible ACM pipe-wrap on the 5th Floor of the "C" Mill Warehouse #6 Building.



Photograph No. 12

Photographer:
Tom Binz

Date: 8/10/2017

Description: (West) Example showing some of the inaccessible ACM pipe-wrap on the 6th Floor of the "C" Mill Warehouse #6 Building.





Photographic Documentation

Client: U.S. EPA Region 5

Site Name: Pillsbury Mills Site

Location: 1525 E Phillips Street, Springfield, IL

Prepared by: Tetra Tech, Inc.

TDD Number: S05-0001-1701-003

Date: November 2x, 2017

Photograph No. 13

Photographer:

Tom Binz

Date: 8/10/2017

Description: (West) Example showing some of the inaccessible ACM pipe-wrap on the 8th Floor of the "C" Mill Warehouse #6 Building.



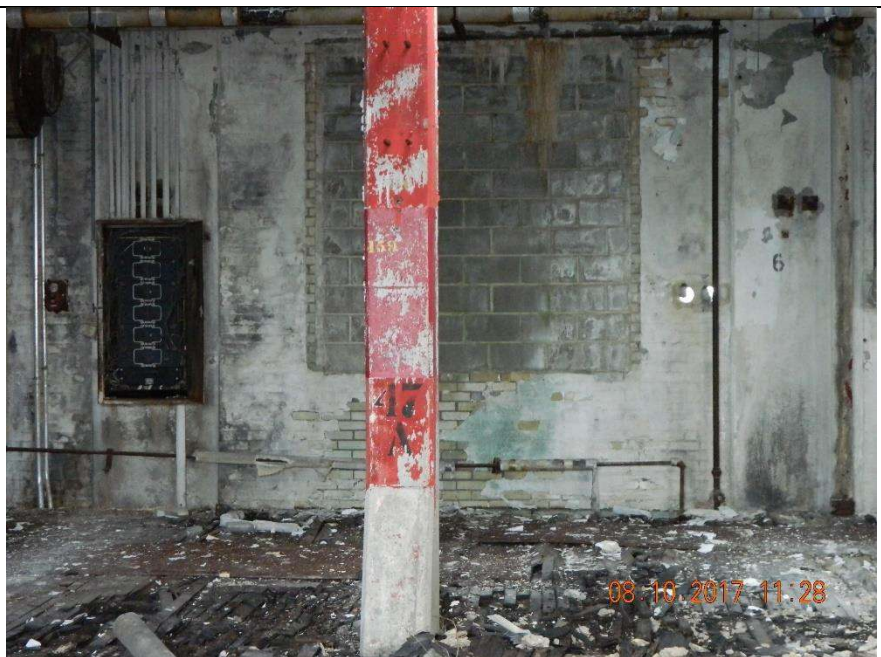
Photograph No. 14

Photographer:

Karl Schultz

Date: 7/16/2015

Description: (West) Example showing some of the inaccessible ACM pipe-wrap on the 9th Floor of the "C" Mill Warehouse #6 Building.



APPENDIX E

ENVIRONMENTALLY PREFERRED PRACTICES

TDD #:	0001/S05-0001-1701-003
Site Name:	Pillsbury Mills - Removal
Site City, State:	Springfield, Illinois
Site Project Manager:	Tom Binz
EPA OSC:	Kevin Turner

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N= Not Used	N/A= Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Energy				
Use of Energy Efficient Equipment				
Computer Equipment (FEMP/Energy Star)			Y	Energy Star rate PC issued
Installation of Electric Service			Y	Power drop from Springfield Power and Electric
Reduce Carbon Emissions from Transportation				
Use Internet Based Meetings/Conferences		NA		
Maximize Carpooling		NA		
Use of Local Labor/Suppliers/Waste Disposal Facilities (50 mile radius)			Y	Local Landfill Class "D"
No idling, except for extreme weather conditions			Y	
Use of Alternative Fuels, if available within 10 miles	N			Not always economically viable due to average of 8-15 cents pricing in the St. Louis, MO area.
Properly Inflated Tires			Y	
Email Small Files (less than 8MB)			Y	
Reusable Electronic Storage Media or the Cloud			Y	
Water				
Use of Low Flow Sampling Pumps		NA		
Waste				
Use of Local Recycling Programs			Y	
Use of Rechargeable Batteries			Y	
Recycling – Other			Y	
Plastic Reduction			Y	
Reuse of Resources		NA		
Direct Push Boring		NA		
Materials				
Printing when Required				
Double-sided Printing			Y	
100% post-consumer recycled paper			Y	

Environmentally Preferred General Field Practices				
<p>If a general category is not applicable, then check N/A for the category box, not for each subcategory.</p>	N = Not Used	N/A = Not Applicable	Y = Yes Implemented	<p>Comments Section</p> <p>Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.</p>
Land & Ecosystems				
Minimize Disruption to Natural Vegetation		NA		
Use of Non-invasive Investigation Techniques		NA		
Environmentally Preferred				
Green Procurement				
Environmentally Preferred Vendors		NA		
Green Lodging/Hotels			Y	
Use of Green Laboratories		NA		